

**LODI CITY COUNCIL
SHIRTSLEEVE SESSION
CARNEGIE FORUM, 305 WEST PINE STREET
TUESDAY, NOVEMBER 12, 2013**

A. Roll Call by City Clerk

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, November 12, 2013, commencing at 7:00 a.m.

Present: Council Member Hansen, Council Member Mounce, Mayor Pro Tempore Katzakian, and Mayor Nakanishi

Absent: Council Member Johnson

Also Present: City Manager Bartlam, City Attorney Schwabauer, and Assistant City Clerk Robison

B. Topic(s)

B-1 Receive Information on the City of Lodi Street Maintenance Program (PW)

Deputy Public Works Director Charlie Swimley provided a PowerPoint presentation regarding the City of Lodi Street Maintenance Program. Specific topics of discussion included overview, street infrastructure, street classifications, pavement types, pavement condition vs. time, signs of pavement stress, treatment types and costs, last ten years, where the City is going, funding, sidewalks and Americans with Disabilities Act (ADA) ramps, 2013 sidewalk survey, ADA ramp survey and data, and ADA improvements.

In response to Council Member Hansen, Mr. Swimley stated the City averages ten ADA ramps a year at approximately \$100,000 either in conjunction with roadway work or as part of a stand-alone ADA project. The Ham Lane project will exceed that average this year.

In response to Mayor Nakanishi, Mr. Swimley stated that road construction is generally done the same way, however the design will vary based on the traffic index.

In response to Council Member Mounce, Mr. Swimley stated that the type of road application used is based on a combination of type of soil underneath and anticipated load.

In response to Council Member Hansen, Mr. Swimley concurred that portions of the Ham Lane project were base failure repairs prior to the overlay and the total project cost was \$1.2 million.

Council Member Mounce questioned why the recent alley reconstruction projects no longer include striping the alleyways, to which Mr. Swimley responded he would look into the matter.

In response to Council Member Hansen, Mr. Swimley stated the cost of asphalt materials had been increasing due to the rising cost of oil and petroleum, but prices are starting to stabilize.

In response to Mayor Nakanishi, Mr. Swimley explained that the maintenance project cost was significantly higher in 2005 due to the Lower Sacramento Road widening project and he anticipated another high year for the forthcoming grade separation project. In further response, Mr. Swimley stated he expects the Citywide inspection of each street to be completed in spring.

In response to Council Member Hansen, City Manager Bartlam stated the gas tax fluctuates based on how much gas is sold, not on the price of gas. Public Works Director Wally Sandelin added that the City did see a slight dip during the recession, but it appears to be on the rise. In

further response, Mr. Sandelin assured that staff, with assistance from San Joaquin Council of Governments, is aware of all available funding sources for street projects.

In response to Mayor Pro Tempore Katzakian, Mr. Sandelin stated that State Transportation Improvement Program (STIP) funding has a federal and a state component, however over the past six to seven years the City has not received state STIP funding, only federal.

In response to Council Member Hansen, Mr. Swimley explained that the yellow tactile strips on handicap ramps became a requirement for all ADA ramps installed after 2007. Mr. Bartlam added that the requirement is part of the building code, the strips are expensive to install, and they are for the visually impaired to warn of upcoming traffic conditions.

In response to Council Member Hansen, Mr. Swimley stated that the Lockeford Street project has been pushed out a couple of years and instead the focus will be on Turner Road improvements between Loma Drive and Pleasant Avenue because the road conditions are much worse and there is a heavier traffic load. The projected time line for this project is design phase this year with construction taking place in 2014.

In response to Council Member Mounce, Mr. Sandelin stated that the traffic signal project for the Lockeford and Stockton Street intersection has also been pushed out, however staff could have plans ready to bid in a few months. There could be some delay due to right-of-way negotiations with the railroad. Mr. Sandelin added that staff is currently performing an analysis of traffic signal intersections, both signalized and non-signalized, and will come back to Council in spring with a prioritized list.

In response to Council Member Hansen, Mr. Swimley stated all traffic signals have either a traffic loop or camera to handle timing. Mr. Bartlam added that the City does not control Caltrans signals.

In response to Council Member Hansen, Mr. Swimley stated citizens can report poor street or traffic signal conditions by calling Public Works or the 24-hour service number. Mr. Bartlam added that there is an on-line reporting function as well.

Mr. Sandelin pointed out that the design standard for streets changed approximately 15 years ago to account for the increase in trucks, buses, and fire engines and many of the older streets have yet to be brought up to the current standard.

In response to Mayor Nakanishi, City Attorney Schwabauer stated some communities have passed ordinances to make homeowners responsible for sidewalks but Lodi does not have such an ordinance. In Lodi, responsibility for a sidewalk would fall on the City because it owns the right of way; however, if a homeowner's tree roots uplift the sidewalk or the sprinklers cause the sidewalk to be slippery, then the homeowner would have primary liability. Should a homeowner be sued and unable to pay, the City would most likely make up the difference. There is no obligation to have a sidewalk and the lack of a sidewalk would not be cause for liability.

Myrna Wetzel questioned why some sidewalks are concrete while others are asphalt and what determines the speed limit on streets. Mr. Swimley responded that sidewalk is concrete in order to be ADA compliant, and Mr. Bartlam added that some areas may have asphalt on the surface to make the area more walkable, however they are not considered sidewalks. Mr. Swimley explained that residential speed limits are 25 miles per hour and arterial and collector street speed limits are subject to speed surveys every seven years and are based on the 85th percentile. Mr. Schwabauer added that the City must adhere to the 85th percentile rule in order to enforce speed limits.

C. Comments by Public on Non-Agenda Items

None.

D. Adjournment

No action was taken by the City Council. The meeting was adjourned at 8:08 a.m.

ATTEST:

Jennifer M. Robison
Assistant City Clerk



CITY OF LODI
COUNCIL COMMUNICATION

AGENDA TITLE: Receive Information on the City of Lodi Street Maintenance Program
MEETING DATE: November 12, 2013
PREPARED BY: Public Works Director

RECOMMENDED ACTION: Receive information on the City of Lodi Street Maintenance Program.

BACKGROUND INFORMATION: The City of Lodi maintains nearly 400 lane miles of streets, 360 miles of sidewalk, 66 traffic signals and numerous other traffic control devices. Managing the City's street maintenance program requires balancing many resources including in-house design and construction staff, outside consultants, general engineering contractors, technology, and multiple funding sources.

The purpose of this presentation is to provide an overview of the City's street maintenance program, alternatives for pavement maintenance, a ten-year history of pavement maintenance activities, planning for future maintenance, the 2013 sidewalk survey, and Americans with Disabilities Act improvements.

FISCAL IMPACT: Not applicable.

FUNDING AVAILABLE: Not applicable.

F. Wally Sandelin
Public Works Director

Prepared by Charles E. Swimley, Jr., City Engineer/Deputy Public Works Director

FWS/CES/pmf

APPROVED:

Konradt Bartlam, City Manager

The City of Lodi
Public Works



Street Maintenance Program

November 12, 2013

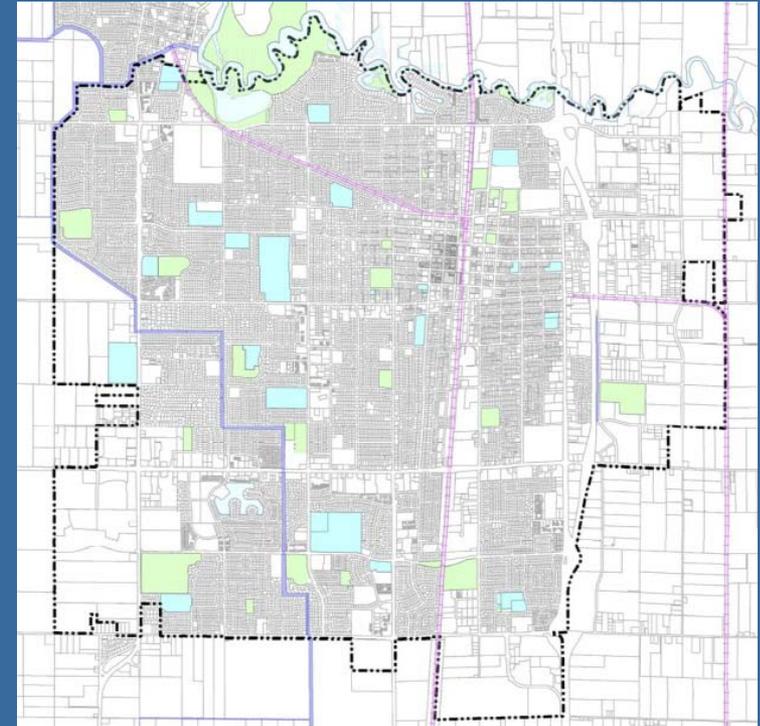
Overview

- Street Infrastructure
- Street Maintenance (Past, Present, Future)
- Funding
- Sidewalk & ADA Ramp Surveys
- Questions



Street Infrastructure

- Pavement and Striping
 - 396 Lane Miles
 - 88 Medians
- Traffic Control Devices
 - 66 Signalized Intersections
 - 890 Stop Signs
 - 76 Yield Signs
 - 835 Crosswalks (Including School Sites)
- Sidewalks
 - 360 Miles
 - 2,600 ADA Ramps
- 2.3 Million Square Feet of Landscape Maintenance
- 7,200 Street Lights (Electric Utility)





Street Classifications

- Street Classifications
 - Residential
 - Collector
 - Arterial
 - Highways (SR12–SR99) Caltrans



Residential (Holt Drive)



Collector (Mills Avenue)



Arterial (Hutchins Street)

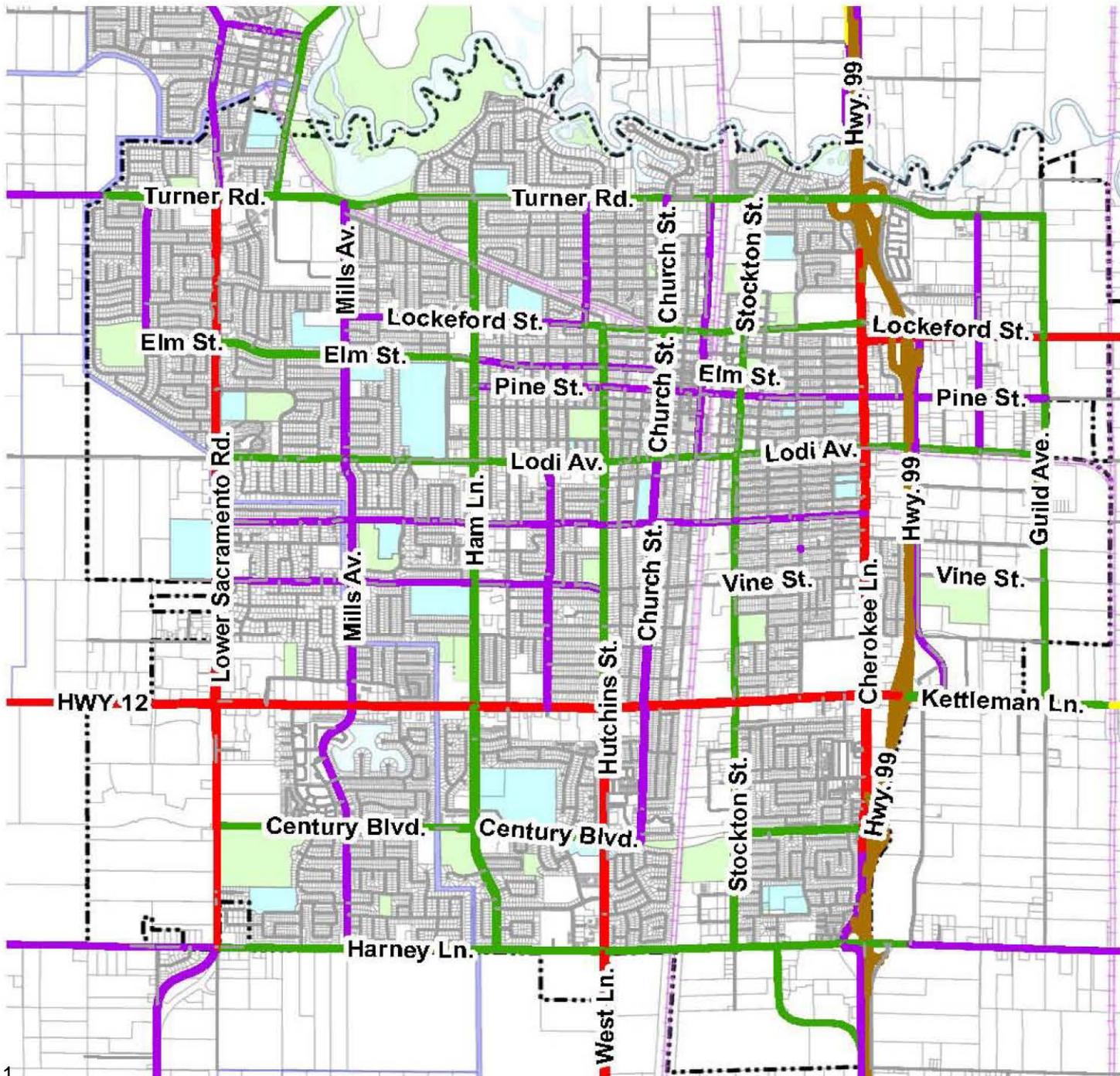


“Expressway” (Harney Lane)



Street Classification

- Interstate
- Other Freeways
- Other Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local

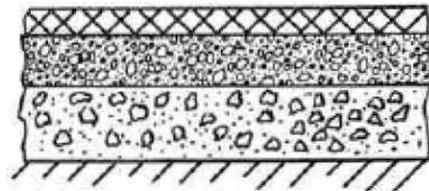




Pavement Types

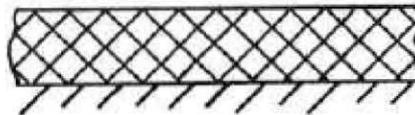
TYPICAL PAVEMENT STRUCTURAL COMPONENTS

FLEXIBLE PAVEMENTS



- Asphalt Concrete Surface
- Aggregate Base
- Aggregate Subbase
- Native Subgrade

FULL DEPTH ASPHALT CONCRETE



- Asphalt Concrete Surface
- Native Subgrade

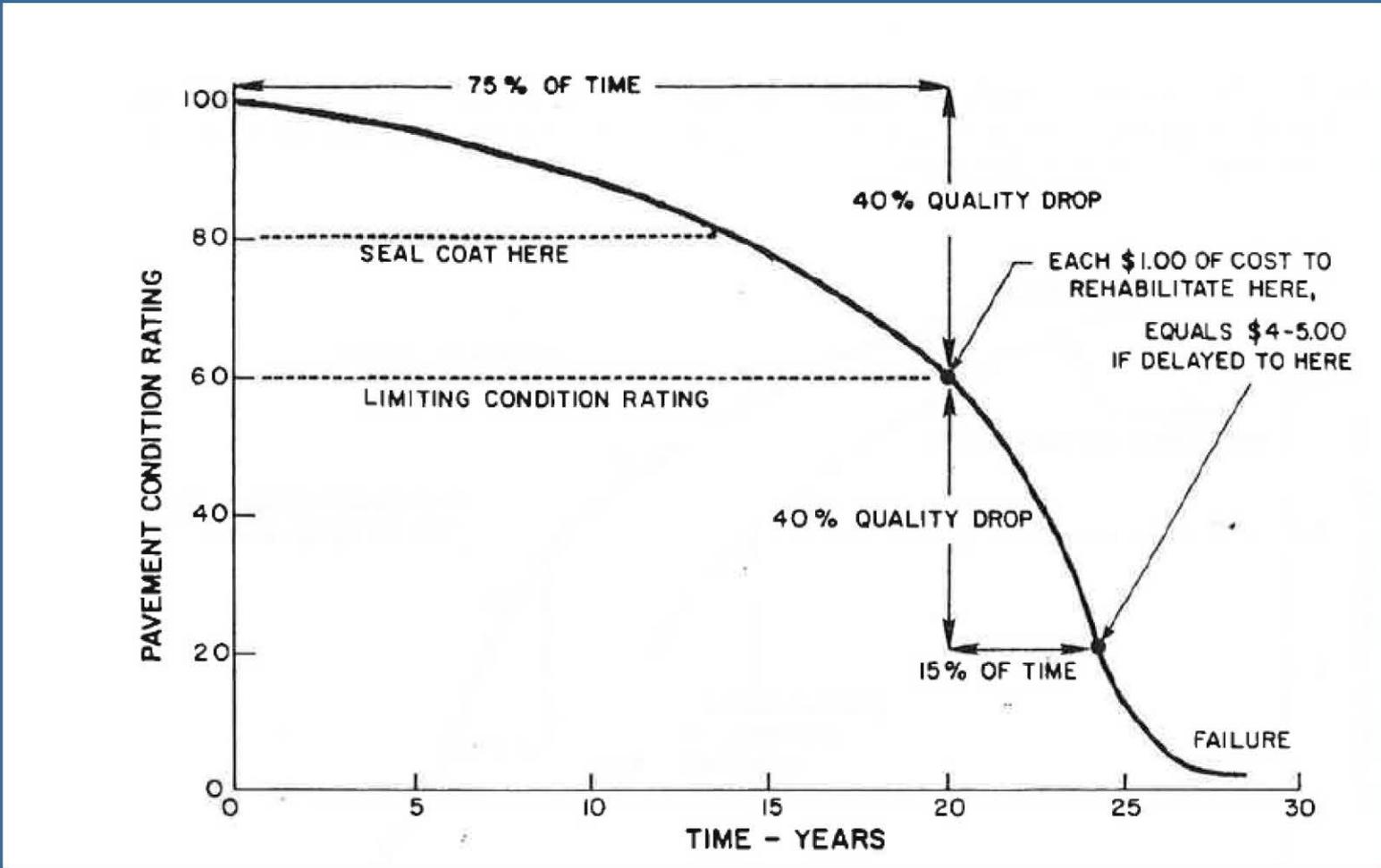
RIGID PAVEMENTS



- Portland Cement Concrete
- Cement Treated Base
- Native Subgrade



Pavement Condition vs. Time





Signs of Pavement Stress

How do you know when
the pavement is bad?



Signs of Pavement Stress

- Cracking
 - Reflective
 - Alligator
 - Block
 - Longitudinal
 - Transverse
- Others
 - Rutting
 - Shoving
 - Raveling



Alligator



Block



Transverse



Rutting



Raveling



Signs of Pavement Stress

Pavement Failure





Signs of Pavement Stress

What can you do about it?

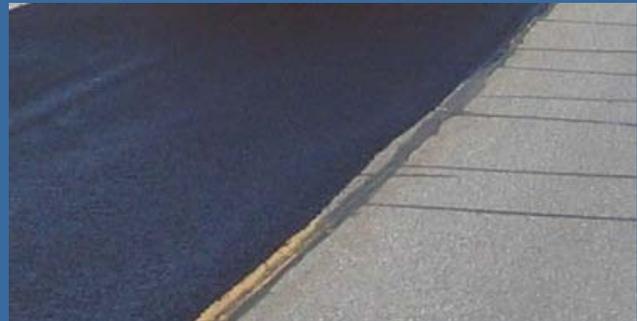


Treatment Types

- Sealing
 - Crack Seal
 - Slurry Seal
 - Chip Seal
 - Cape Seal
 - Microsurfacing



Crack Seal



Slurry



Cape Seal



Microsurfacing



Treatment Types

- Repair
 - Base Failure Repair (Digout)
 - Thin Overlay
 - Thick Overlay
 - Full Reconstruction



Base Failure Repair



Overlay



Full Reconstruction

Treatment Costs



Street Treatment Type	Typical Cost per SF
Crack Seal	Varies (\$3-\$5 per pound) or \$/SF
Slurry Seal	\$.13-\$.18 / SF
Chip Seal	\$.20- \$.30 / SF
Cape Seal (Rubberized Chip)	\$.33-\$.45 / SF
Microsurfacing	\$1.00-\$2.00 / SF
Base Failure Repair	\$5-\$15 / SF
Thin Overlay (< 3/4")	\$.75-\$1.00 / SF
Overlay (1"-4")	\$1.25-\$3.00 / SF
Reconstruct	\$4-\$7 / SF



Where We've Been...



Last Ten Years

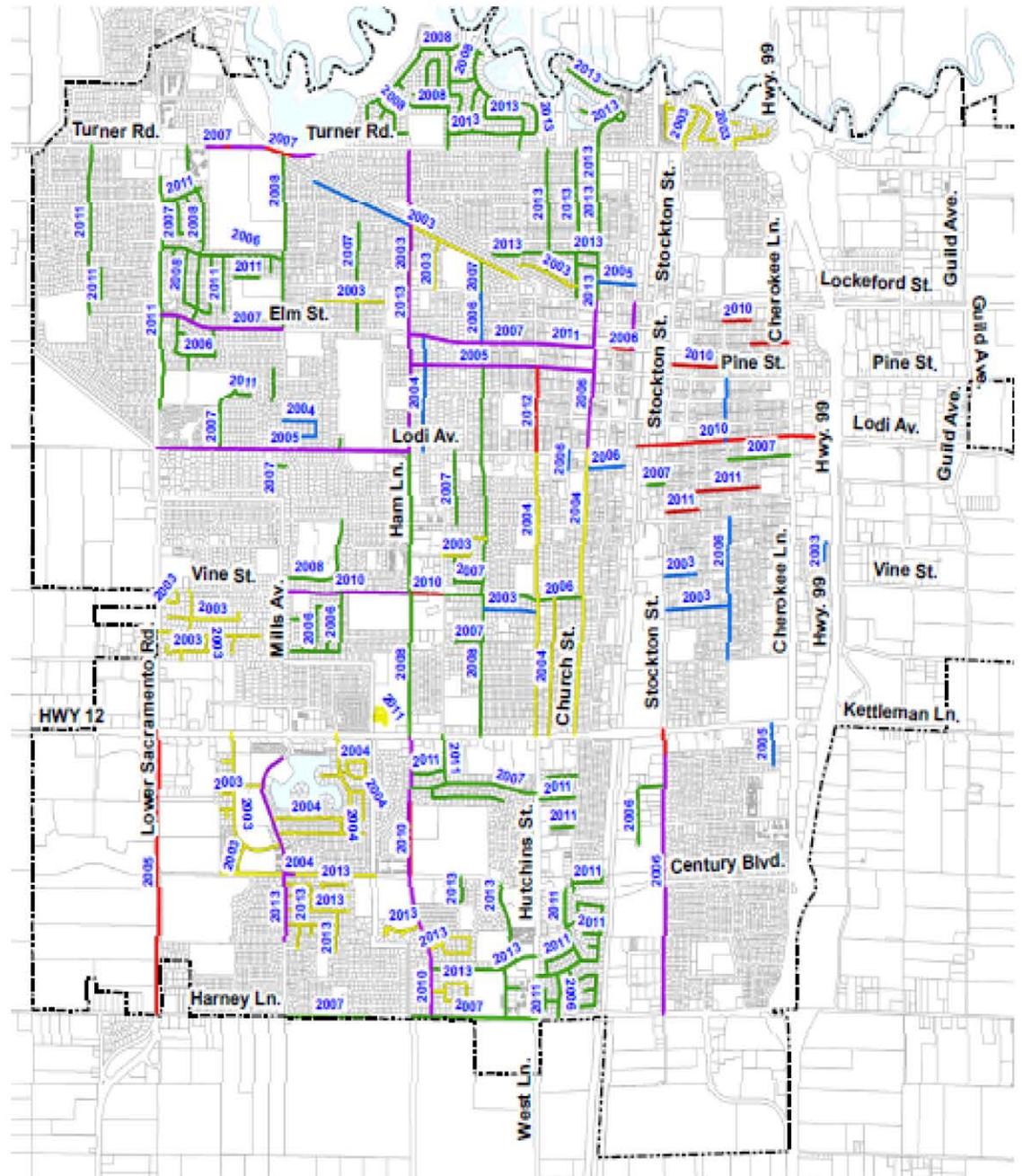
- Annual Crack Sealing Projects (City Forces and Contractors)
- 7 Restriping Projects
- 5 Cape Seal and Slurry Projects
- 14 Thin Overlay Project (City Forces)
- 17 Thick Overlay / Reconstruction Projects
- 4 Alley Reconstruction Projects

Street Improvements 2003 - 2013



LEGEND:

- Street Reconstruction
- Thick Overlay
- Thin Overlay
- Rubberized Cape Seal
- Slurry





Last Ten Years

- Street Reconstruction: 7.0 Lane Miles
- Thick Overlay: 18.5 Lane Miles
- Thin Overlay: 6.5 Lane Miles
- Rubberized Chip / Cape Seal: 49.5 Lane Miles
- Slurry Seal: 25.5 Lane Miles

Alley Improvements 2003 - 2013



LEGEND:

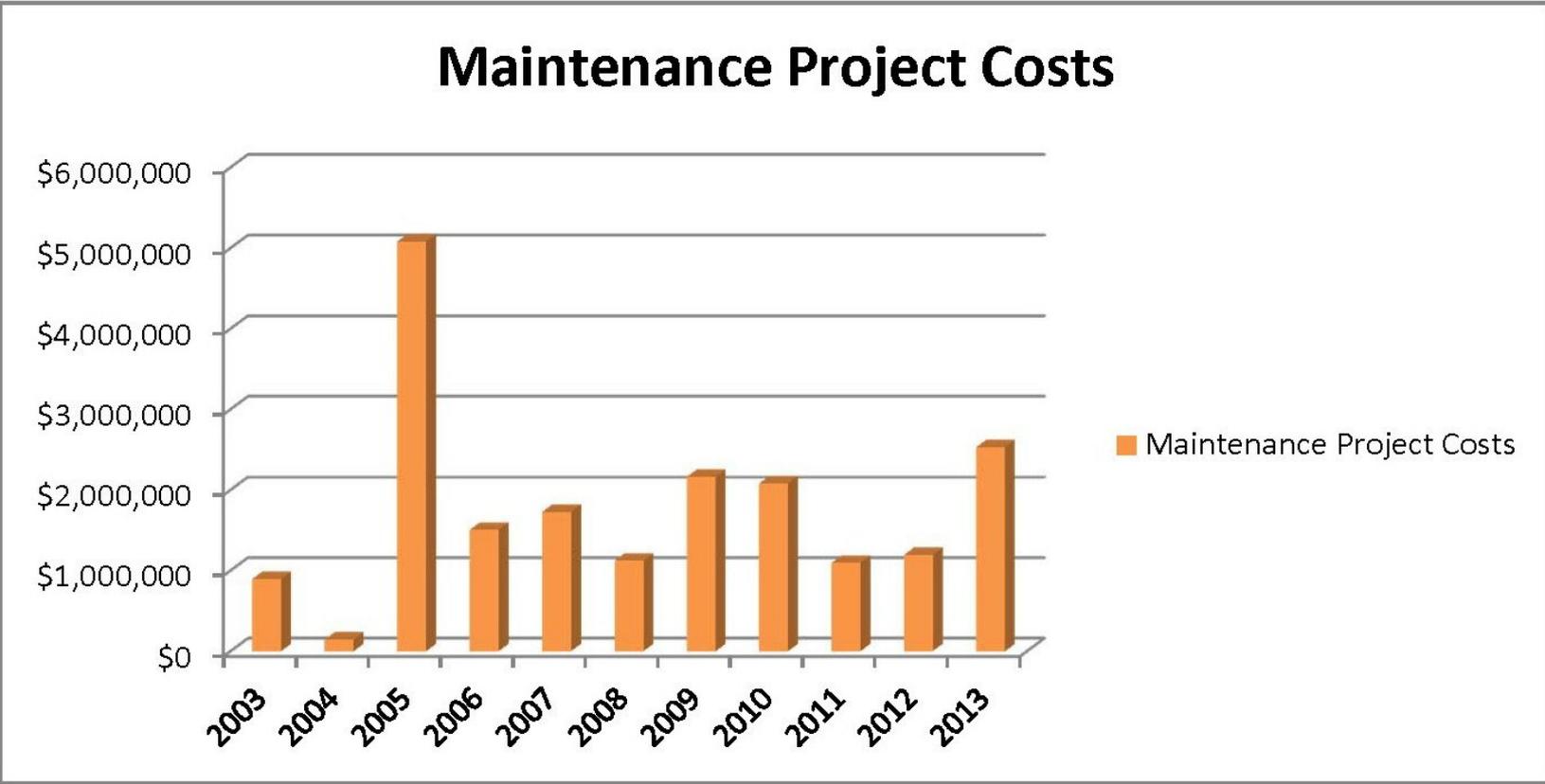
 Reconstructed Alleys





Last Ten Years

Street Maintenance and Improvement Project Costs 2003 - 2013



Total: \$19.5 Million



Where We're Going...

Where We're Going

- New Pavement Management Program

- StreetSaver

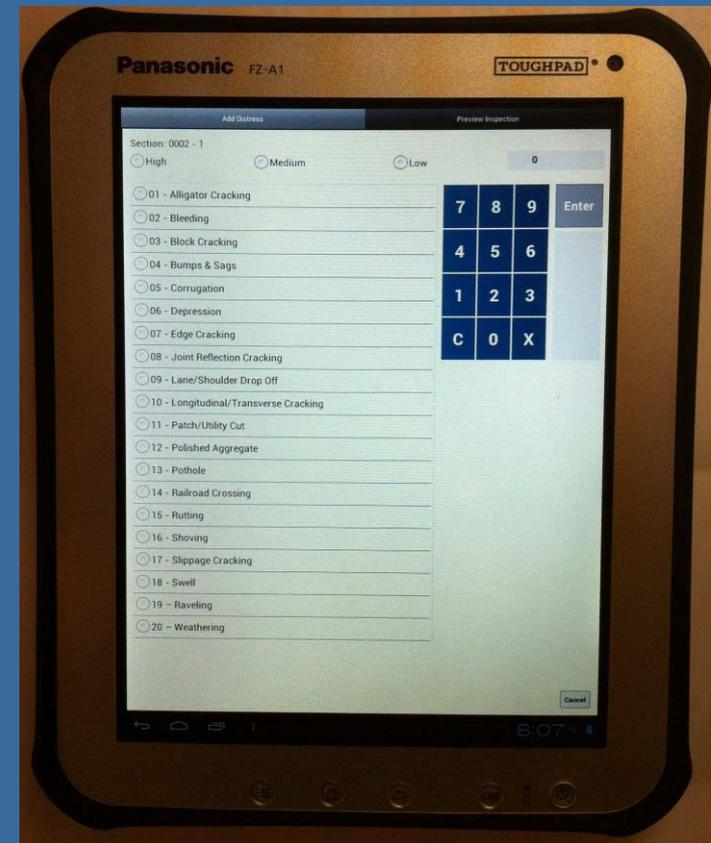
- Developed by the Bay Area Metropolitan Transportation Commission (MTC)
- Used by over 400 Local Agencies in California
- Uses a Standardized Pavement Condition Index (PCI) Rating System





Where We're Going

- How it Works:
 - Inspection of Each Street
 - By City Staff
 - Calculates PCI (67 in 2009)
 - Treatments Recommended

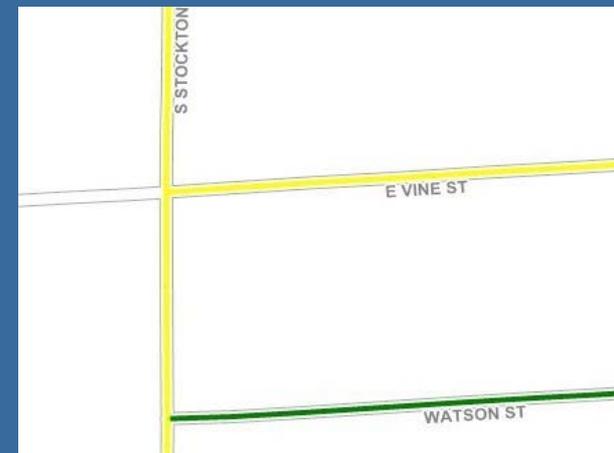




Where We're Going

- Why We Use it?
 - Project Prioritization
 - Tracks Pavement Condition Index
 - Compare Lodi to Other Cities
 - Budget Tool
 - Cost Savings

Condition Category	Pavement Condition	PCI Category
I	Good to Excellent	100
II / III	Fair	70
IV	Poor	50
V	Very Poory / Failed	25
		0



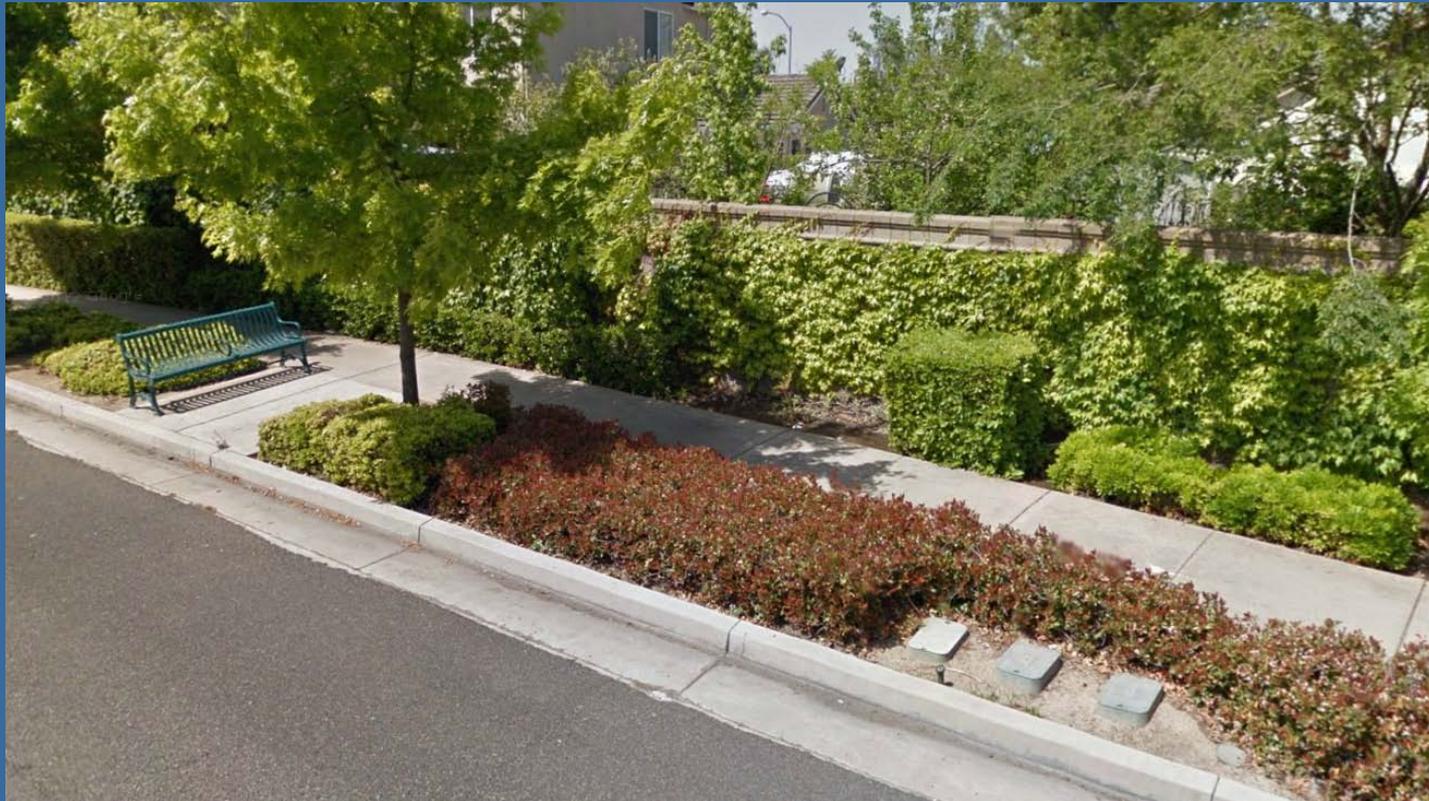
Funding

- 
- Local
 - Measure K
 - Developer Paid (formally Impact Fees)
 - State
 - STIP (State Transportation Improvement Program)
 - RTIF (Regional Transportation Improvement Fund)
 - TDA Bike Ped
 - Prop 1B / Prop 42
 - Gas Tax
 - Gas Tax Swap (Formally Prop 42)
 - Federal
 - CDBG (Community Block Grant)
 - TE (Transportation Enhancement)
 - CMAQ (Congestion Management)
 - RSTP (Regional Surface Transportation Program)



Sidewalks & ADA Ramps

From Streets to Sidewalks...



Lower Sacramento Road



Sidewalks & ADA Ramps

- 360 Miles of Sidewalk
- 2,600 ADA Ramps
- Surveys
 - 2013 Sidewalk Survey
 - Identifying Potential Tripping Hazards
 - 2002 ADA Ramp Survey
 - Updated with New Projects
- Both Inventories Managed Internally (GIS)



2013 Sidewalks Survey

- Modified Duty Parks Dept. Employee
- April – August 2013
- Identify Potential Tripping Hazards Citywide
- Vertical Offsets $> \frac{1}{2}$ "
- By Address
- Used a Tablet Computer

The screenshot shows a web-based survey form titled "Sidewalk Survey Form" with a "City of Los Angeles" logo. The form includes the following fields and options:

- District:** 3 (dropdown)
- Field Survey Date:** 6/11/2013
- Address:** 1937 S CHURCH ST (dropdown)
- Reverse Frontage?:**
- APN:** 06220005
- Sidewalk Damage Type:** Uplift/Depress (dropdown)
- AC Sidewalk?:**
- Sidewalk Repair Width:** (text input)
- Previously Repaired?:**
- Sidewalk Repair Length:** (text input)
- Sidewalk Offset Type:** Uplift (dropdown)
- Sidewalk Offset (inch):** 0.5
- Sidewalk Crack Condition:** Minor/Non_tripping (dropdown)
- Repair Type:** Grind (dropdown)
- C and G Damage Type:** (dropdown)
- C and G Repair Length:** (text input)
- Damage Caused by Tree?:**
- City/Private?:** (dropdown)
- Damage Caused by Utility:**
- Utility Owner:** (dropdown)
- Note:** (text area)



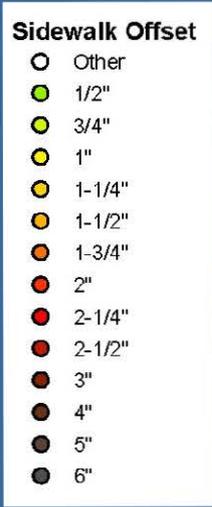
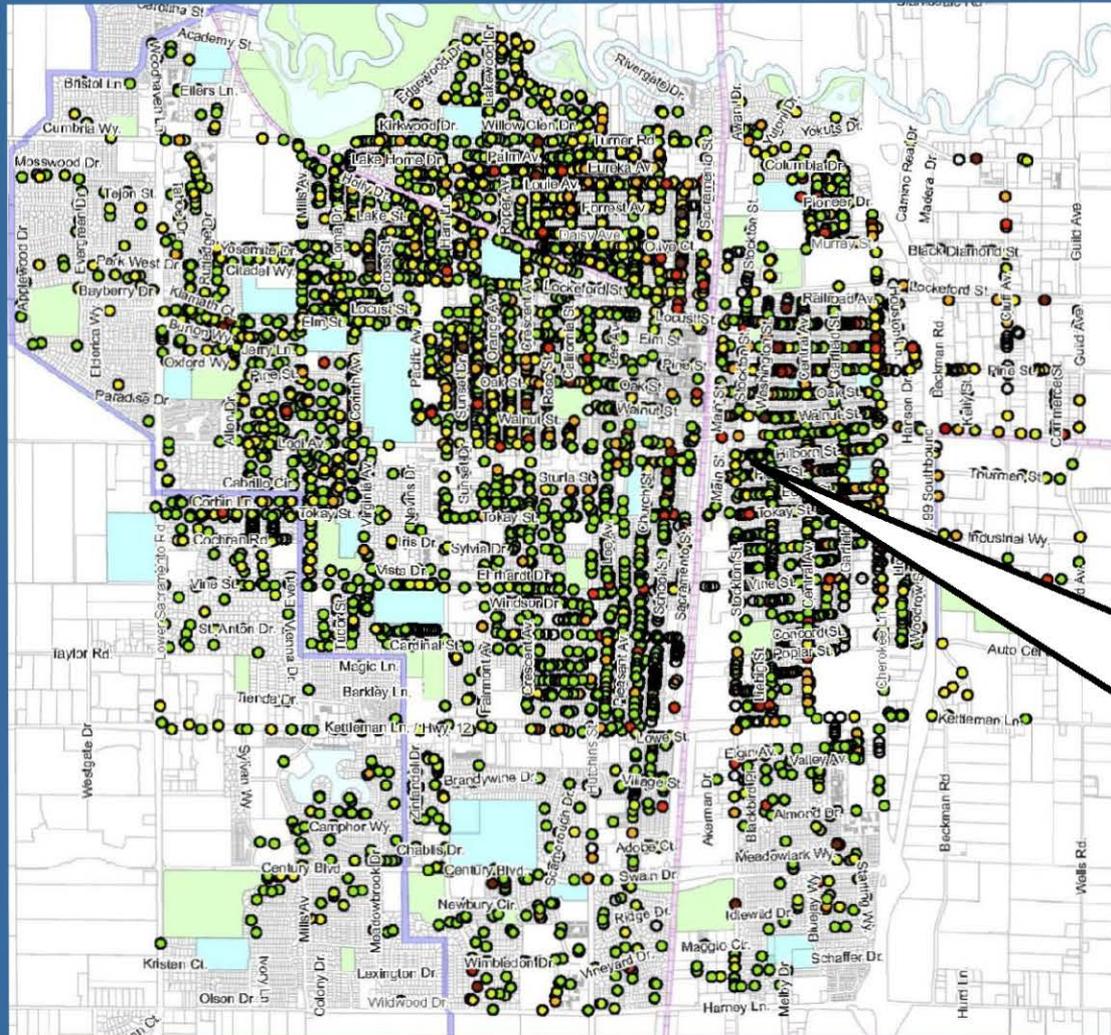
2013 Sidewalk Survey

So How Bad is It?





2013 Sidewalks Survey





2013 Sidewalk Survey

- Survey Results:
 - 10,988 Locations
 - 3,796 Grindable (0.5"-1.25" & Clean Edge)
 - 6,226 Patchable (0.5"-2" & Any Edge)
 - 643 Sidewalk Reconstruction Locations (>2" Offsets)
 - 258 Locations Missing Sidewalk

2013 Sidewalk Survey



- What Are We Doing About It?
 - Sidewalk Grinding Contract
 - \$150,000 Budgeted 13/14 – 14/15
 - Misc. Concrete Replacement Contract (Starting at 4"+ Locations)
 - \$300,000 Budgeted 13/14 – 14/15
 - Notifying Homeowners at Private Tree Locations
 - Streets Dept. Patching





2013 Sidewalk Survey

Cost to Fix it All:

Item	Description	Locations	Est. Quantity	Unit	Unit Cost	Total Cost
1)	Grind	3,796	18,980	Lineal Feet	\$6	\$113,880
2)	Patch	6,226	6,226	Each	\$25	\$155,650
3)	Reconstruct Sidewalk	643	22,640	Square Feet	\$18	\$407,520
4)	Reconstruct Curb & Gutter	328	4,807	Lineal Feet	\$75	\$360,525
5)	Construct Sidewalk (Gaps)	258	32,469	Square Feet	\$14	\$454,566
6)	Construct Curb & Gutter (Gaps)	29	1,099	Lineal Feet	\$60	\$65,940

Total Cost for All Improvements: \$ 1,558,081

Notes:

- 1 Grinding may only be performed at select locations with offsets less than 1.25".
- 2 Patching will only be performed at select locations with offsets less than 2".
- 3 Any offset greater than 2" is assumed to require reconstruction.
- 4 All AC paths are removed and replaced with concrete.
- 5 Assuming sidewalk replacement areas of 5' x 10' when not identified by the survey.
- 6 Assuming curb and gutter replacement lengths of 10' when not identified by the survey.
- 7 Some overlapping may existing to reconstruct / construct sidewalk and curb & gutter.
- 8 Unit costs include contract administration.



ADA Ramp Survey

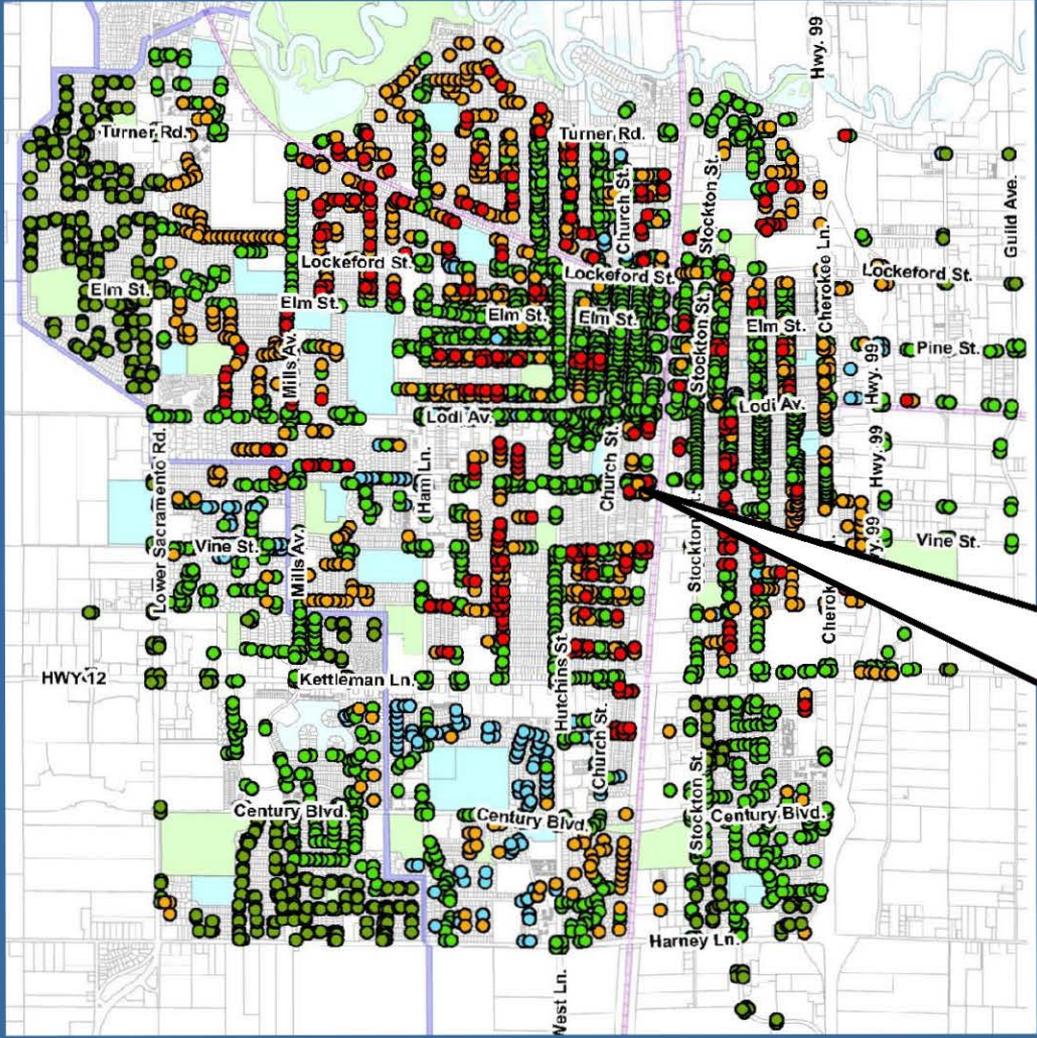
2002 ADA Ramp Survey



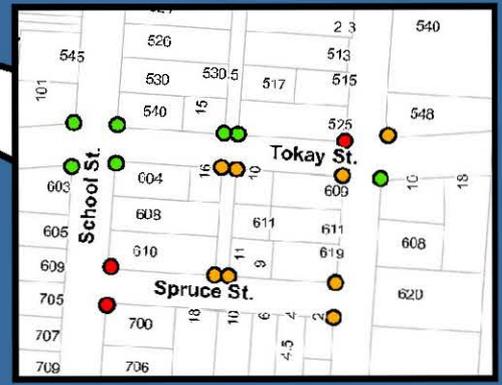
Southeast corner of Turner and Laurel



ADA Ramp Survey Data



- No Ramp, with Catch Basin
- No Ramp, No Obstructions
- Ramp Significantly Out of Compliance
- Ramp met ADA at Time of Survey
- Ramp Constructed After Survey





ADA Ramp Survey Data

- ADA Ramp Inventory
 - 3,508 Total Locations that Should Have Ramps
 - 637: No Ramp, No Obstructions
 - 278: No Ramp, Catch Basin in Ramp Area
 - 200: Significantly out of Compliance
 - 1,935: New Ramp or Ramp that Met 2007 ADA
 - 458: Ramps Not Surveyed, Presumed To Meet 2007 ADA (Constructed with Newer Subdivisions)



ADA Improvements

Cost to Fix All Ramps:

Quantity	Description	Estimated Cost / Ramp	Total
637	No Ramp, No Obstructions	\$5,000	\$3,185,000
278	No Ramp, Catch Basin in Ramp area	\$10,000	\$2,780,000
200	Significantly Out of Compliance	\$5,000	\$1,000,000
1935	New or Met ADA at Time of Survey (Needs Detectable Warnings)	\$400	\$774,000
458	Ramp Constructed After Survey (Needs Detectable Warnings)	\$400	\$183,200
Estimated Total to Bring All City Ramps into Compliance :			\$7,922,200



Questions