

Irving  
CITY LIMIT



**IRVING**

# Road to the Future

\$100 Million in 5 Years

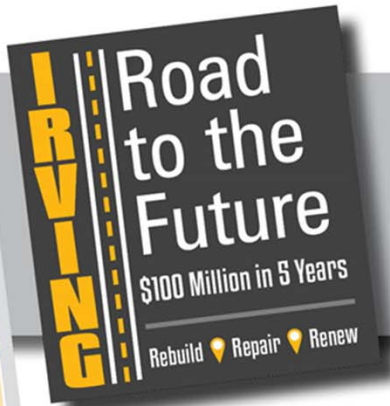
Rebuild  Repair  Renew

Council Meeting  
November 10, 2016



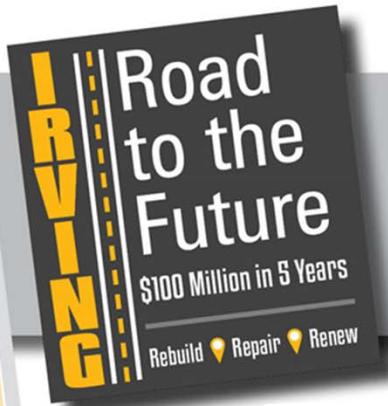
# Overview

- Pavement Assessment Background
- Maintenance Strategies
- Pavement Condition Index
- Financial Overview
- Next Two Years
- Transportation Upcoming Projects
- CIP Upcoming Projects
- Communication Tools
- Challenges
- Next Steps



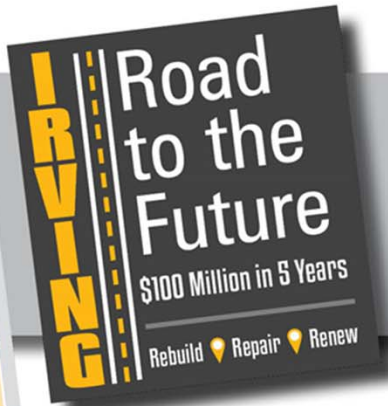
# Pavement Assessment- Background

- Inventoried existing street assets (550+ centerline miles of streets; 1,400+ lane miles)
- Developed Street Rating Geographical Data Base (GIS)
- Develop cost scenarios for long term maintenance of the roadway infrastructure network



# Pavement Assessment- Maintenance Strategies

Activity	Cost per Lane Mile	Life (Years)
Concrete Streets with Asphalt Surface "B" & "C"		
Crack Seal	\$ 2,000	3 - 5
Mud Jack	Varies	5 - 7
Pavement Rejuvenation	\$ 11,000	5 - 7
Slurry Seal	\$ 13,000	5 - 7
Micro Surface	\$ 19,000	5 - 7
"C" Street		
Full Depth Repair Asphalt	\$ 50,000	5 - 7
Partial Reconstruction Concrete	\$ 114,000	10 - 12
Asphalt "D" & "E"		
Rehabilitation (Street Summer Overlay Program)	\$ 150,000	10 - 12
Restoration	\$ 165,000	18 - 20
Concrete Full Reconstruction	\$ 1,100,000	20 + Years



# Pavement Assessment- Pavement Condition Index

As of 2015 the City's street system has a 72 PCI which is equivalent to a "C"

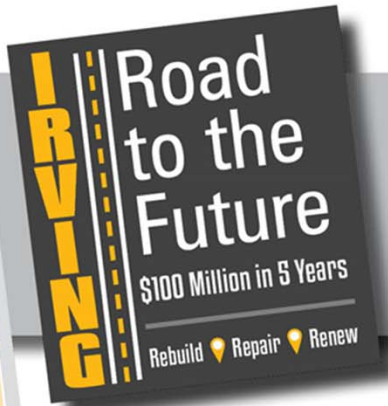
**Distress Type**  
Defined by ASTM E1778

**Distress Severity**  
Low Moderate High

**Distress Quantity**  
Measured

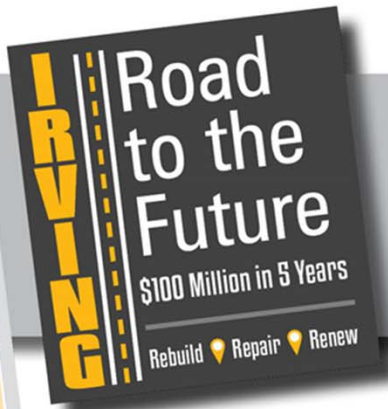
**PCI**  
0 to 100 Range

PCI Score	Streets Grade
100-95	"A"
95-85	"B"
85-70	"C"
70-50	"D"
50-0	"E"



# Financial Overview: \$100 Million in 5 Years

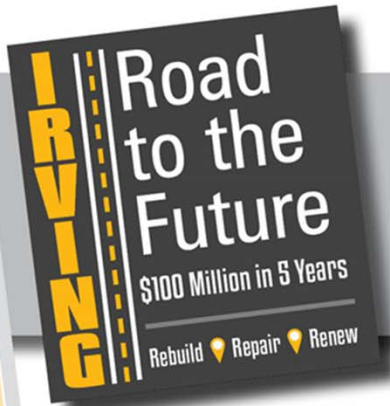
Source of Funds	Amount
Normal Capital Improvement Program	\$36,700,000
Additional Capacity created using taxes generated on growth above the normal projected 2% amount in Ad Valorem Taxable Value. We expect the growth to support \$7.5 million in 10 year debt in each of the next five years.	37,500,000
Taxes generated on 1 cent of the tax rate. This dedication is phased-in by setting aside ½ cent in FY16-17, a cent in FY17-18, and using 1 cent in fiscal years 18-19 to 27-28 to service \$22.5 million in debt.	25,800,000
Creating a five year investment of:	\$100,000,000



# Financial Overview: \$100 Million in 5 Years

FY	Original 5-Year Plan	Debt supported		Debt supported by 1 cent	Total by Fiscal Year
		Additional Capacity	1/2 Cent and 1 Cent		
16-17			1,100,000		1,100,000
17-18	6,100,000	7,500,000	2,200,000	22,500,000	38,300,000
18-19	10,100,000	7,500,000			17,600,000
19-20	10,500,000	7,500,000			18,000,000
20-21	3,000,000	7,500,000			10,500,000
21-22	7,000,000	7,500,000			14,500,000
Totals	36,700,000	37,500,000	3,300,000	22,500,000	100,000,000

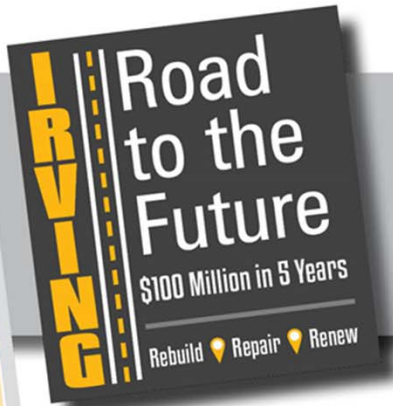
Note - Bonds are typically sold in May/June with cash received June/July



## Next 2 Years

- In the next 2 years the Public Works Team are diligently working to prepare for the financial infusion into the street system including:
  - Conducting design in-house for projects that have meet certain design criteria
  - Evaluating projects that may need outside design
  - Prioritizing projects that design is completed or will be completed in the interim.
  - Bidding out projects that can be underway in the interim
  - Using current funds to begin maintenance strategies

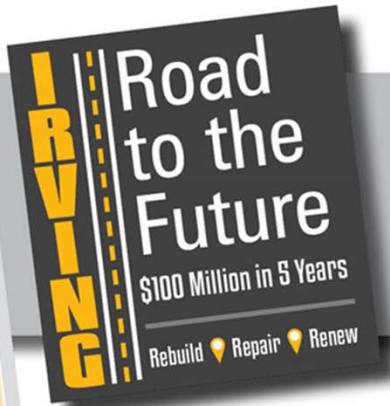




# Transportation Upcoming Projects FY 16-17 and FY 17-18

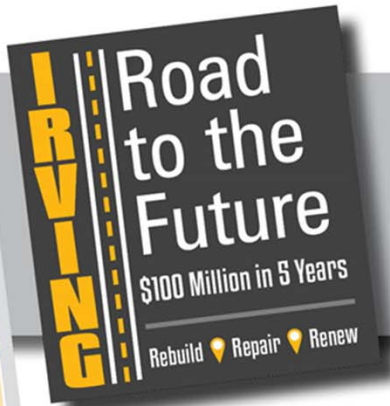
For FY 16-17 Transportation estimates completing the milling and overlay of portions of the 13 streets listed below. Additional streets for FY 17-18 are currently being reviewed.

- Holland Dr.
- Mosswood Ln.
- Glenbrook Dr.
- MacArthur Blvd.
- Britain Rd.
- Hanover Ln.
- Pleasant Run Rd.
- Durango Ct.
- Crestview Cir.
- Keyhole St.
- Summit Dr.
- John Smith Dr.
- Northridge Dr.



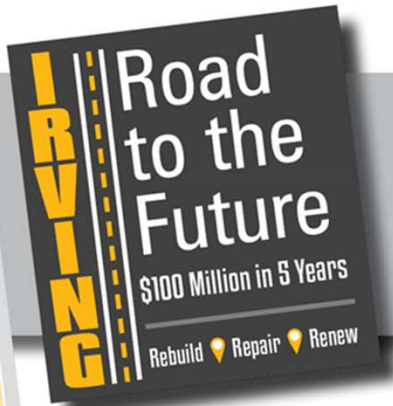
# CIP Upcoming Projects FY 16-17 and FY 17-18

- Design Neighborhood Streets
- Design Major Streets
- Bridge Reconstruction for SH 183 Drainage
- Neighborhood Street Reconstruction
- Glenmore & Shepherd Street Reconstruction
- Hard Rock & Pioneer Reconstruction
- South Nursery



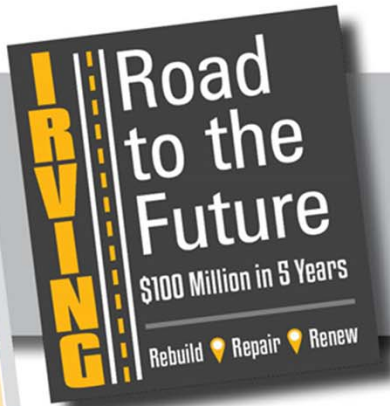
# Communications Tools

- City Spectrum
- ICTN
- City Website
- Social Media
- City Council Meetings, Operations Update, Transportation and Natural Resources Committee (TNR)
- Reading File
- Neighborhood News
- Neighborhood Roundtable
- Nextdoor



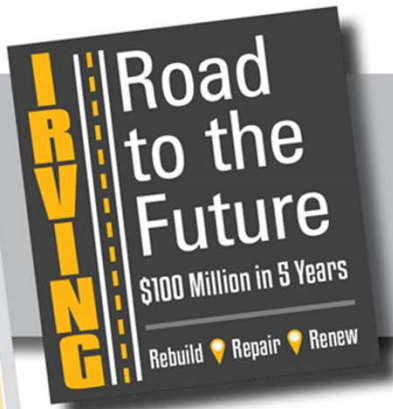
# Challenges

- Coordination of design and procurement
- Securing of outside design consultants
- Personnel needs related to project management
- Inter-departmental coordination
- Unknown system events (such as water pipeline breaks)



## Next Steps

- Finalize maintenance strategies
- Identify priority projects
- Utilize Communication Tools
- Present to Transportation and Natural Resources Committee Road to the Future Phase II (anticipated December TNR)
  - Staffing Levels
  - Long range funding strategies



# Discussion