

# CITY OF ORINDA

## Road and Drainage Repairs Plan

(As Updated in 2016)



**March 15, 2016**



*(ORIGINALLY ADOPTED BY THE CITY COUNCIL JULY 17, 2012 AND  
UPDATED APRIL 22, 2014)*

# CITY OF ORINDA

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## Acknowledgements

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and

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**Richard Nelson, Vice-Chair**  
**Walter Bell**  
**Gordon Bizieff**  
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**CITY OF ORINDA**  
**ROAD AND DRAINAGE REPAIRS PLAN**  
**(As Updated in 2016)**

**Approved March 15, 2016 by the Orinda City Council**

**INTRODUCTION**

Since the approval of the 2012 Road and Drainage Repairs Plan (originally referred to as the 10-Year Plan) and the revised version of the Plan, dated April 22, 2014, there have been several changes that necessitate another revision to reflect those modifications moving forward. The first was the passage of Measure L, a one-half cent sales tax increase that provides approximately \$1 million each year (aka Plan Phase 1); a second, more important change was the passage of Measure J (aka Plan Phase 2) which allows the City to raise \$20 million through a general obligation bond issue to be used exclusively for the repair of the worst Residential roads and associated drains. This third update to the Plan is to clarify/revise the Plan goals and propose the next Phases of work and recommend the amount of funding that will be needed to achieve the Plan goals.

**Terms**

Terms used by staff and others have proven to be difficult to understand, thus the following is provided to help the public understand this Plan and Staff Reports regarding the program.

CIOC - Citizens Infrastructure Oversight Commission - This is a group of citizens appointed by the City Council to provide oversight of the selection and approval of roads and drains to be repaired using public funds and monitoring expenditures for road and drainage repairs.

PCI - Pavement Condition Index - This is a measurement of the condition and expected life of segment of road; PCI is used to determine which roads should be rehabilitated and when a road will have work done. (Attachment 1). The PCI of

each road segment is field verified every two years for Arterials, Collectors and School Routes, and the Residential roads every four years. The next update, for all roads, is scheduled for Spring 2016.

AADT - Average Annual Dally Traffic - This is a measure of the frequency of use of a road and is used to help determine which repair project will benefit the greatest number of residents.

PMP - Pavement Management Program - This is the program used by the City to manage the repair of public streets.

RTS - Return to Source Funds - This refers to the funds that are returned to the City from the .5% countywide sales tax. This sales tax program is managed by the Contra Costa Transportation Authority (CCTA) and is also known as CCTA Measure J.

Associated Drainage – This includes existing pipes, culverts and gutters under and adjacent to the roadway surface.

## SCOPE

Total Cost \$88 million (see Attachment 2 on page 21)

### Goal/Objective

The revised goal of this Plan update is to improve Orinda’s roads and drains with the objective of increasing the minimum of all roads to PCI = 50 over the course of this Plan and to have sufficient resources to maintain them in that condition thereafter. This new goal clarifies the objective of the previous Plan which set the goal as “The objective is to increase the citywide average Pavement Condition Index from the present level of 51 to 70 over the next ten years and, at the end of the ten-year period, to have sufficient annual revenues to continue to maintain the public road system in that condition thereafter. As a result of this policy, the City anticipates that all publicly owned roads should be in the “good” to “excellent” range (PCI of 50 and above) by the end of the ten-year period.” This updated Plan will be updated at least every two years and all decisions about

changes in policy and the selection of roads to be repaired will be made at public meetings before the CIOC and the City Council [CC].

## **Background**

The City of Orinda has 92.5 miles of paved publicly owned roads, with most Residential roads considered to be in Poor condition at the start of the Plan in 2012. Over the previous ten years, the City has spent an average of \$2.3 million per year on street maintenance and repairs. Approximately \$0.8 million annually had been drawn from the City's General Fund and the Garbage Franchise Fees and used for routine street maintenance (potholes, striping, sweeping, drainage, etc.). Approximately \$1.5 million annually has been available for pavement rehabilitation and reconstruction, drawn from dedicated sources of funds -- Gas Tax, the countywide transportation sales tax Return-to-Source funds, and grant revenues from county and federal sources averaged over the 10-year period.

In 2012 the voters approved a .5% sales tax (Measure L) for the first phase of this Plan. This tax is currently raising approximately \$1 million per year for road repairs. Then in 2014 the voters approved \$20 million in general obligation bonds (Measure J) for the second phase of this Plan. Both of these phase/measures have been designated to fix the City's worst Residential roads first.

Along with these new funds the City has continued to apply for and receive grant funds. In 2015 the City was awarded approximately \$2,998,000 to reconstruct Ivy Drive (Moraga Way (North) to Fiesta Circle (North)) and Camino Pablo (Moraga Way to Miner Road).

The objective of this Plan Update is to raise the minimum PCI of all roads to 50. Upon completion of the first four phases of this Plan, by June 2023, it is anticipated that all publicly owned roads will be in "good" to "excellent" condition (PCI of 50 or greater). StreetSaver, the software package utilized by the City to monitor road conditions and to assist in formulating recommendations for street repair, will continue to be used to determine appropriate treatments to maintain

roads as they wear and to determine the point at which they should be reconstructed.

Prior to the passage of Orinda Measures L and J, the City's policy was to focus pavement rehabilitation dollars on Arterials, Collectors, and School Routes, which are the roads that affect the greatest number of users. The policy (Attachment 3) meant that no money, except for emergency repairs, were allocated to Residential road repair. With approval of the Measures L and J, the CIOC was directed by the City Council to develop a policy and criteria for spending these new revenue sources. The CIOC, with input from Orinda residents, advanced a policy and criteria that focuses Measure L and J funding on Residential public roads, which serve the most users and those roads in the worst condition. The policy (Attachment 4) and criteria for Measure L and J funds were approved by the City Council on January 21, 2014.

Until all of the City's worst Residential roads are repaired, the improvements/repairs will be focused on pavement reconstruction (Full Depth Reclamation, Cold In-Place Recycling and milling with a thick overlay). As the program moves on to roads that are less distressed (higher PCI) in the later stages of Phase 3 and in Phase 4, the improvements/repairs will shift to less costly and simpler repairs such as seal coats, slurry seals (with and without minor patching) and milling with a thin overlay.

### **Current Budget Challenges**

The City's General Fund overall operating budget, funded in great part by property taxes, sales taxes, and fees, is approximately \$12.1 million (excluding the Measure L .5% Sales Tax). These revenues fund Police, Public Works and Engineering Services, Legal, Parks and Recreation, Planning, Maintenance, and Administrative functions. This includes service fees generated from programs such as Planning and Parks and Recreation, which are restricted to providing services in those areas. Working with the limited available revenue and increased costs for services, the City has continued to maintain a balanced budget.

Currently, the budget leaves little discretionary general revenues to allocate toward additional roadway maintenance and is far too limited to fund the improvements that are needed for the City's roads. However, growth in property tax revenues in the future may provide opportunities to assign additional funds to the roads which will be evaluated annually by the City Council during the annual budget preparation.

The City has two programs for road repair. The Annual Pavement Management Program, funded by Gas Tax and countywide transportation sales tax Return-to-Source (RTS) funds (\$1,071,815 in 2015), repairs the City's most heavily travelled roads, including Arterials, Collectors, and School Routes. In addition, the City uses County and Federal transportation grant revenues when available for Arterial and Collector repair. These grants are competitive and vary from year to year. The Measure L and J Program, funded by the Measure L Sales Tax revenues (\$1,045,761 F Y 2015) and Measure J bond (\$5,000,000 in FY 2015), repairs Residential roads with the most users and roads in the worst condition.

To date \$10 million of the \$20 million raised by the passage of Measure J has been budgeted for road reconstruction in fiscal years 2015 and 2016. Under this updated Plan the remaining \$10 million from Measure J will be budgeted for the FY 2017 program.

### **Current Road Repair Selection Process**

The City is currently in Phase 1 and 2 of the Plan and has two sources of funding for the roads. The City is continuing the Pavement Management Program, focused on Arterials, Collectors, and School Routes, using funds from the Gas Tax and countywide transportation sales tax Return-to-Source revenues. The City is beginning to use the Phase 1 and 2 revenues generated by Measures L and J to repair Residential roads. Potential revenue generated during a future Phase 3 will be used to supplement Measure L and J and to expand the repair of all Residential public roads.

The City currently has two sets of policies to select roads for repair and reconstruction -- one set for Arterials, Collectors and School Routes and another for the Residential roads to be repaired using the Measures L and J revenues. These policies and criteria were developed by the CIOC with citizen input, and were given final review and approval by the City Council. The two sets of policies and criteria are noted below and attached at the end of this report:

- City of Orinda Pavement Management Program (PMP) Policy and Criteria for Selecting Streets for Repair, Adopted October 18, 2011 (Attachment 3)
- City of Orinda Measure L and J Program Policy and Criteria for Selecting Streets for Repair Using Measure L Sales Tax Funds, Approved January 21, 2014 (Attachment 4)

For the Arterial/Collector/School Route program, an initial selection is made using StreetSaver, a pavement management software program using criteria designed to apply appropriate treatments to these roads so as to maintain them in Good condition at minimum cost. The results from StreetSaver are then evaluated by City staff (with modifications to reflect issues with utility coordination, grant availability, and coordination with other infrastructure projects), and a preliminary analysis and recommendation are presented to the CIOC. The CIOC then evaluates the recommendation in a public meeting(s) to develop a final recommendation that is then forwarded to the City Council.

For the Measures L and J programs, roads are selected for reconstruction from a list of the worst Residential roads -- those in "Very Poor" condition defined as having a PCI of 25 or less. Measure L and J funds are spent only on these roads, starting with the highest traffic volume segments and working down the list to segments with lower traffic volume. Projected revenues from Measures L and J are estimated to enable the City to reconstruct most of these road segments over a ten-year period but will leave many Residential roads in poor and deteriorating condition.



## **Funding**

### **Multi-Phase Approach**

This Plan consists of five funding phases (see Table 1) in which the City will fund, plan, and manage the construction and repair of public roads and drains. The final phase is for on-going maintenance of the newly reconstructed roadways and drainage systems.

The Plan depends upon City Council and voter approval of several new revenue sources. As part of the Plan, the City will continue to fund the annual Pavement Management Program, with a focus on Arterials, Collectors, and School Routes, using funds from Gas Tax and Return to Source. Additionally, the Director of Public Works and Engineering Services, in conjunction with the CIOC, will forward to the City Council an annual Measure L and J Program, with recommendations on how and where to allocate the new revenue for repair of public Residential roads and drainage systems.

At this time, the Plan recommends a combination of sales tax, general obligation bonds, and future non-specified revenue sources. The total new revenue required in Phase 3 and Phase 4 to complete the plan is estimated at \$47 million, in addition to the Gas Tax and countywide transportation sales tax Return-to-Source revenues and the Measure L and J revenues. When Phase 4 is completed, it will be essential that the City implement on-going maintenance and repair to maintain the improved condition of the public roadways.

**Table 1 – Multi-Phase Approach to Fund Orinda’s Roads and Drainage Repairs  
(1)**

<b>Phase 1 Approved 2012</b>	<b>2012</b>	<b>Half-Cent Sales Tax Measure with a 10-Year Sunset (Measure L)  To be Appropriated Annually from the General Fund by the City Council</b>
<b>Phase 2 Approved 2014</b>	<b>2014</b>	<b>\$20 Million General Obligation Bond (Measure J)</b>
<b>Phase 3</b>	<b>2016</b>	<b>\$25 million of new revenue, to be raised by a General Obligation Bond</b>
<b>Phase 4</b>	<b>2018</b>	<b>At least \$22 million of new revenue, to be raised by a Bond or Parcel Tax or other new source</b>
<b>Phase 5</b>	<b>2022</b>	<b>(a) Extension of the Half-Cent Sales Tax for On-going Maintenance/Rehabilitation; and  (b) Other Revenue Sources as required to maintain the improved condition of the roads.</b>

(1) The timing and phasing of funding options may accelerate based upon voter support

**Phase 1** (Approved 2012, Measure L) of the Plan calls for the passage of a half-cent sales tax increase, which was approved by a general election in November 2012. The revenue generated from the increase is now available in the General Fund. It was first allocated in FY14 to begin the repair of the worst publicly owned Residential roads. It is the intention of the current Council that these funds will continue to be appropriated annually to continue the repair of the worst Residential roads and associated drainage infrastructure. Over the past

year, the CIOC has developed policies and criteria for selection of the roads for repair with this revenue. This tax is estimated to generate approximately \$1 million per year over the 10-year life of the tax.

**Phase 2** (Approved 2014, Measure J) of the Plan calls for the passage of a General Obligation Bond of \$20 million, which requires a 2/3-majority vote to implement. This measure was approved by the voters through a June 2014 ballot as Measure J. During Phase 2, revenues from both Measures L and J are being used to repair the City's worst Residential roads. The intent is that, by the end of Phase 2, all publicly owned Residential roads in "Very Poor" condition (defined as a PCI less than 25 in 2012) will have been repaired. It is anticipated that these funds will be drawn down and spent within a four to five year period.

**Phase 3** of the Plan calls for an additional \$25 million from a new general obligation bond to continue to raise the remainder of the funds necessary to repair all the Residential roads that have deteriorated to a PCI<25 in the years since 2012 and once that is accomplished to repair the remaining roads with a PCI between 25 and 50. These funds will be used to repair the worst Residential roads first, as defined in Phase 2, and then moving on to the remaining public roads to be selected based on road condition (PCI) and traffic (AADT).

**Phase 4** of the Plan calls for the remaining \$22 million from one or more financing alternatives to achieve the goal of no Orinda road having a PCI less than 50. These funds will be available over years 2019 to 2022 and be used to repair the remaining public roads so that all of Orinda's roads will be in good to excellent condition. Funding sources to be considered could include a bond issue, a parcel tax, a real estate transfer tax, and/or a citywide assessment district. All of these additional funding sources would require voter approval.

**Phase 5** of the Plan would be implemented in 2022 and would ensure the adequacy of continuing funding to maintain the public roads at PCI of 50 or greater, with all roads in "Good" to "Excellent" condition. Costs of maintaining the roads at this level have been estimated at \$3 million based upon current costs, but may increase beyond that level if there are unanticipated increases

over the 10-year period. With the expiration of the Measure L Sales Tax in 2022, it is estimated that revenues available from the Gas Tax and the countywide transportation sales tax Return-to-Source funds for the roads will be approximately \$1 million. The core of Phase 5 is an extension of Measure L, the ½ cent sales tax, which currently generates approximately \$1 million per year. The combination of these revenue sources would generate about \$2 million per year. Any County or Federal grants would add to this amount.

If additional revenue sources such a real estate transfer tax, parcel tax or general obligation bond are approved in Phase 5 extending beyond 2022, or if the City is able to commit additional funding to the roads from increased property tax revenues, there may be sufficient funds available that no additional revenue measure(s) would be needed for Phase 5. However, if a shortfall exists then additional funding would be based upon voter approval.

### **Implementation**

After funding is obtained, road repair and reconstruction will be implemented by the City's Public Works and Engineering Services Department using City staff supplemented with outside engineering and construction management consultants. Road selection and design will include public hearings, review and recommendation by the Citizens Infrastructure Oversight Commission, and authorization by the City Council at public meetings. Documents proposing changes in road repair policy or specific roads to be repaired will be distributed and be publicly available prior to the CIOC or Council meetings at which they will be considered. Approval of Phase 3 by the voters will permit a substantial increase in the scope of projects in FY 2017. The City plans to supplement existing staff by hiring an outside consultant to assist with planning and managing the expanded program.

In general, the City expects to continue its existing policies regarding repair of the public roads. As noted above, these include dedicating gas tax and other dedicated funds (including possible grants) to repair Arterials, Collectors, and School Routes and use of revenues from Measure L and J and new revenue

sources developed in Phases 3 and 4 of this plan to fix the public Residential roads. Each fiscal year of the Plan, the City will select specific roads to be repaired consistent with funding that is available.

The selection of Arterials, Collectors, and School Routes will be based on recommendations of the StreetSaver program modified by any special conditions, such as planned work on roads by EBMUD, PG&E, the County, or other partners, or consolidating work on adjacent roads to obtain more favorable bids from contractors. The City expects this process to result in all “Poor” or “Very Poor” Arterials, Collectors, and School Routes being improved.

The selection of Residential public roads to be repaired will follow the policies adopted for the use of Measure L and J funds, initially focusing repair on our worst Residential roads (those with PCI under 25) until all of those roads have been repaired and there are no longer any Residential roads in “Very Poor” or “Failed” condition. Within this group of roads, the more heavily traveled roads will be repaired before less heavily traveled roads, but all of the public worst roads are expected to be repaired by the end of Phase 2 – that is within the next 3 years. In Phase 3, the focus of repair will be the Residential roads that have deteriorated to a PCI<25 in the years since 2012 and once that is accomplished to repair the remaining roads with a PCI between 25 and 50. The selection of public roads to be repaired in Phase 3 will be managed to move closer to the goal of having no road with a PCI of less than 50. This could result in some roads in better condition waiting longer for treatment.

Each year, the selection of Residential roads will be based upon updated information that is available at that time. This updated information will include the actual funding that is available from gas tax and sales tax sources (which can only be estimated at that time), the actual schedule of drawdowns of Measure J in Phase 2, and the actual revenue available from the additional revenue sources enacted in Phase 3. It also will include updated information on the condition of each Residential road, how it has deteriorated from its prior condition, and what treatments are appropriate considering its current condition.

## Summary

The City Council and staff recognize that the magnitude of the investment needed to bring the City's public roads and drainage infrastructure into full repair will require a multi-phased approach over several years. Consideration has been given not only to fiscal need, but also to how to manage such a large project. Given both considerations, a multi-phased planned approach will be taken to address the City's infrastructure problems. This multi-phased approach will make use of recommendations from the CIOC and existing project and program management practice, which is successfully improving the City's public roads. Based upon public support, the Plan may be accelerated to address the failing infrastructure in a more timely and efficient manner.

The work on the Arterials, Collectors and Bus Routes continues using the funds (Gas Tax, General Fund and Return to Source) allocated for that purpose with new sections having been selected and approved. If and when staff secures additional grant monies, as they have in the past, those funds will be used to augment this work.

In the 2014 Plan, the amount of \$12.5 million was estimated to be needed for the drain repair work; staff now has a more accurate estimate of \$14 million based upon a recent thorough survey of associated public drains. To date the City has been fortunate that the roads being repaired have, for the most part, not been the ones that needed to have their drains repaired simultaneously. The level of drainage repair will change, necessitating work being done on drains as well as the roads in order to protect the new/repared pavement.

## **Attachments**

1. Attachment 1 – Pavement Condition Index (PCI) Ratings Definition with Images of Varying PCI Ratings and Impact of Drain Failure
2. Attachment 2 - Table 2, City of Orinda Road and Drain Repair Plan Estimated Revenue and Costs (\$25 million Phase 3 and \$22 million Phase 4)
3. Attachment 3 – City of Orinda Pavement Management Program Policy and Criteria for Selecting Streets for Repair, Adopted October 18, 2011
4. Attachment 4 – City of Orinda Pavement Management Program Policy and Criteria for Selecting Streets for Repair Using Measure L Sales Tax Fund, Approved January 21, 2014
5. Attachment 5 – CIOC Annual Report to the City Council, 2015, included by reference. The Annual Report can be found on the City’s Web Site under the Roads and Infrastructure Tab.





## Pavement Condition Definitions

<b>PCI Range</b>	<b>Condition</b>	<b>Description</b>
90-100	Excellent	Little or no distress.
70-89	Very Good	Little or no distress, with the exception of utility patches in good condition, or minor to moderate hairline cracks; typically lightly weathered.
50-69	Good	Light to moderate weathering, light load-related base failure, moderate linear cracking.
25-49	Poor	Moderate to severe weathering, moderate levels of base failure, moderate to heavy linear cracking.
0-24	Very Poor	Extensive weathering, moderate to heavy base failure, failed patches, extensive network of moderate to heavy linear cracking.

(Table I-7, City of Orinda 2012-2013 Pavement Management Program Update (PTAP-13), Final Report, October 2012, Prepared by Harris & Associates)

Please see the attached photographs for examples roads at various PCI's.





Greenwood Court  
PCI 15



Charles Hill Road  
PCI 8



Ardith Drive at Darnby  
PCI 47



Rheem Blvd  
PCI 70



Claremont Avenue  
PCI 80

**Table 2 - Roads and Drains Repair Plan and Maintenance Plan Estimated Revenue and Expenditures Forecast**

**Table 2a - Existing Revenue Sources for Roads and Drains (Millions) (1)**

Revenue Source	10 Year Planning Period										Total	
	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23		
Gas Tax & RTS	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 1.0	\$ 1.0	\$ 1.0	\$ 1.0	\$ 1.0	\$ 1.0	\$ 9.5

(1) Existing Dedicated Revenue Sources for Roads and Drains - The existing revenue sources are currently being utilized for limited public road and drain repair and maintenance. After the roads system has been elevated to a PCI > 50 (Good), these funding sources will be dedicated to sustaining the newly achieved level. At today's current dollar value the cost to maintain City roads and drains at the current level (PCI>50) is \$3 million annually. Current revenue sources include Transportation Impact Fees, Drainage Impact Fees, Gas Tax, countywide sales tax return-to-source funds and General Fund.

**Table 2b - New Revenue sources for Roads and Drains Repairs Construction (Millions) (2)**

Revenue Source	10 Year Planning Period										Total	
	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23		
.5 Cent/Measure L	\$ 1.0	\$ 1.0	\$ 1.0	\$ 1.1	\$ 1.1	\$ 1.1	\$ 1.2	\$ 1.2	\$ 1.3			\$ 10.0
Phase 2 - Bond		\$ 5.0	\$ 5.0	\$ 5.0	\$ 5.0							\$ 20.0
Phase 3				\$ 6.3	\$ 6.3	\$ 6.3	\$ 6.3					\$ 25.2
Phase 4						\$ 5.5	\$ 5.5	\$ 5.5	\$ 5.5			\$ 22.0
Phase 5										\$ 1.3		\$ 1.3
<b>Total New Revenue</b>	<b>\$ 1.0</b>	<b>\$ 6.0</b>	<b>\$ 6.0</b>	<b>\$ 12.4</b>	<b>\$ 12.4</b>	<b>\$ 12.9</b>	<b>\$ 13.0</b>	<b>\$ 6.7</b>	<b>\$ 6.8</b>	<b>\$ 1.3</b>		<b>\$ 78.5</b>

**Total Funds Available**      **\$ 1.9   \$ 6.9   \$ 6.9   \$ 13.3   \$ 13.3   \$ 13.9   \$ 14.0   \$ 7.7   \$ 7.8   \$ 2.3   \$ 88.0**

(2) New Revenue Sources for Road and Drainage Repairs and Construction – With the approved Measure L Sales Tax (Phase 1) and the Measure J Bonds (Phase 2) and if the Phase 3 and 4 measures are successful, the new revenue will be available for the City Council to annually appropriate to bring the public roads system to a system with all roads having a PCI of 50 or greater and for under-road drainage repair. Additionally, new revenue would be available to contribute to the ongoing maintenance efforts to reach the required \$3.0 million annually.

**Table 2c - Estimated Expenditures for Roads and Drains Repair By Program (Millions) (3)**

	10 Year Planning Period										Total	
	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23		
Road Repairs Budget	\$ 1.5	\$ 5.5	\$ 5.5	\$ 11.4	\$ 11.4	\$ 12.0	\$ 12.1	\$ 6.2	\$ 6.3	\$ 2.3		\$ 74.2
Drain Repairs Budget	\$ 0.4	\$ 1.4	\$ 1.4	\$ 1.9	\$ 1.9	\$ 1.9	\$ 1.9	\$ 1.5	\$ 1.5	\$ -		\$ 13.8
<b>Total</b>	<b>\$ 1.9</b>	<b>\$ 6.9</b>	<b>\$ 6.9</b>	<b>\$ 13.3</b>	<b>\$ 13.3</b>	<b>\$ 13.9</b>	<b>\$ 14.0</b>	<b>\$ 7.7</b>	<b>\$ 7.8</b>	<b>\$ 2.3</b>		<b>\$ 88.0</b>

(3) Table 2c shows an estimated cost for each year of the Plan. Actual expenditures will be made over the current and future fiscal years based on construction scheduling. These amounts were derived using the StreetSaver program. StreetSaver indicates that this cost plan will achieve the objective of a road system with all roads having a PCI of 50 or greater. Both public road and under-road drainage repair construction costs have been increased by 2.2% per year for inflation. The construction costs inflation rate is the current rate used by Caltrans.

Note: Totals may not match due to rounding.



**City of Orinda  
Pavement Management Program (PMP)  
Policy and Criteria for Selecting Streets for Repair  
Adopted October 18, 2011**

**Policy:**

Current budgetary constraints and the poor and deteriorating condition of Orinda's roads require the City to apply budgeted PMP funds only to those roads *where the most benefit for the most residents can be obtained*. Simply stated, this means that only Arterials, Collectors and School Routes will have repair priority; emergency repairs will be made to Residential streets only when severe safety concerns arise. Recognizing that urgent/emergency repairs on Residential streets will increase under this policy, the City should also allow for certain urgent repairs to be performed on all street classifications including residential streets that meet specific criteria.

**Criteria for Priority Selection of Arterials and Collectors**

1. Frequency of use, as measured by Average Annual Daily Traffic (AADT)
2. Efficiency of expenditure, as measured by the **StreetSaver®** program
3. Availability of significant cost savings through partnering, (i.e., with utilities and/or residents)
4. Proximity to schools

**Criteria for Urgent Pavement Repair Selection on Arterial, Collector and Residential**

City of Orinda staff should consider and evaluate pavement condition/damage relative to:

1. Safety - Pedestrian, Bicycle, and Vehicle
  - More Frequent Accidents
  - Increased Stopping Distance
  - Hazard Avoidance
  - Emergency Vehicle Access
2. Evaluation of Failure and Estimation of Repair Cost/Repair Life

Size of the failed area (larger than a pothole) and severity of the failure  
(i.e. base failure)  
Related Drainage Issue  
Weakened Sub-grade  
Underground Springs  
Exclude Geotechnical Recommendations of Slide Repairs (Separate  
Slope Stabilization Fund Source)

3. Selection process

Location will be identified by staff observation and/or complaints received

Traffic volume

Staff shall review the locations using Criteria 1 and 2 above.

Repairs will be made as locations are identified and based on the availability of funding.

The Citizens' Infrastructure Oversight Commission (CIOC) shall review and approve the recommended repair locations.



**City of Orinda**  
**Pavement Management Program (PMP)**  
**Policy and Criteria for Selecting Streets for Repair Using Measure L Sales**  
**Tax Funds**  
**Approved January 21, 2014**

**Policy**

With the adoption of the Measure L, .5% Sales tax, the City has an additional source of funds for road repair and reconstruction. This Measure represents the first phase of a multi-year plan to repair all the City's streets. Even with this additional funding, current budgetary constraints and the poor and deteriorating condition of Orinda's roads require the City to apply budgeted funds only to those residential roads *where the most benefit for the most residents can be obtained*. With the Measure L funds the City has committed to make repair of the residential roads a priority. The goal of this program is to distribute the residential roads to be repaired throughout the City.

**The Program**

Annually, funds permitting, roads to be repaired will be selected as follows:

1. The street segments must be classified as *residential*.
2. The street segments must be among the *worst residential roads*, which means the Pavement Condition Index (PCI) for that segment of road as calculated by the StreetSaver program is less than or equal to 25, and with ride quality (roughness of ride) considered using an acceptable objective measure.
3. The most *heavily used residential road segments*, based on actual traffic counts, will be repaired first. The road segments will be rank in descending order of traffic volume, with the highest volume road segments forming a pool of candidate roads for the annual program.
4. Other factors, such as equitable distribution of the projects throughout the community and underground utility repair schedules, will be considered in selecting the annual list of road segments to be repaired.



**Citizens' Infrastructure Oversight Commission**  
**Annual Report to the Orinda City Council**  
**2015**

*Attached by Reference*

The Annual Report can be found on the City's Web Site under the Roads and Infrastructure Tab.