Draft Five-Year Plan

For The

Waste Tire Recycling Management Program

(7th Edition Covering Fiscal Years 2013/14-2017/18)

Draft Report to the Legislature

October 15, 2012 Workshop

The following document is a draft report that contains only the proposed activities and budgets for FYs 2013/14-2017/18. The full version of the draft report that contains program status, objectives, performance measures, activities, budgets and appendices will be presented during a CalRecycle workshop to be held tentatively in March 2013.

Five-Year Plan for the WasteTire Recycling Management Program

Senate Bill (SB) 876 (Escutia, Statutes of 2000, Chapter 838) was enacted to provide a comprehensive measure to extend and expand California's regulatory program related to the management of waste and used tires. One of the key provisions of this measure requires the Department of Resources Recycling and Recovery (CalRecycle) to adopt and submit to the legislature a Five-Year Plan (Plan) that included proposed budget allocations. In addition, it requires that the Plan be updated every two years. The sixth edition of the Five-Year Plan was adopted in May 2011 and covers Fiscal Years Fiscal Years 2011/12 through 2015/16. Staff has begun the process to revise the plan to cover FYs 2013/14 to 2017/18. The following table is a summary of draft proposed expenditures for the seventh edition covering FYs 2013/14-2017/18. Further details of each program area are contained in this draft Plan. We anticipate the next version of the draft revised Plan will be presented during a CalRecycle workshop in March 2013.

Table 1: Total Tire Program Funding for Fiscal Years 2013/14-2017/18**

Program Areas	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	Totals for All Fiscal Years
Enforcement	$7,835,000	$7,585,000	$7,585,000	$7,585,000	$7,585,000	**$38,175,000**
Hauler and Manifest Program	$450,000	$450,000	$450,000	$450,000	$450,000	**$2,250,000**
Cleanup*	$3,000,000	$3,000,000	$3,000,000	$3,000,000	$3,000,000	**$15,000,000**
Research	$1,000,000	$500,000	$500,000	$500,000	$500,000	**$3,000,000**
Markets	$9,306,675	$10,056,675	$10,056,675	$10,056,675	$10,056,675	**$49,533,375**
Program Staffing and Administration	$7,630,833	$7,630,833	$7,630,833	$7,630,833	$7,630,833	**$38,154,165**
Administration	$1,924,000	$1,924,000	$1,924,000	$1,924,000	$1,924,000	**$9,620,000**
Mandatory Contracts	$1,375,492	$1,375,492	$1,375,492	$1,375,492	$1,375,492	**$6,877,460**
Totals	**$32,522,000**	**$32,522,000**	**$32,522,000**	**$32,522,000**	**$32,522,000**	**$162,610,000**

** The cleanup element includes the Farm and Ranch Solid Waste Cleanup and Abatement Grant Program. Its spending authority is separate from the Tire Fund's spending authority.*

***The Tire Fee is scheduled to be reduced to 75 cents on Jan. 1 2015; however CalRecycle's spending authority will remain unchanged until adjustments are made through an approved Budget Change Proposal and included in the State's Enacted Budget. CalRecycle estimates that sufficient funds exist in Tire Fund to support the current level of expenditures, and will closely monitor the impact of the Jan. 1, 2015 fee reduction on the revenue, Fund balance, and cash flow to determine if further adjustments are necessary.*

Introduction

The Five-Year Plan is divided into the program elements identified in Public Resources Code (PRC) section 42885.5(b). These elements are:

- Enforcement and Regulations Relating to the Storage of Waste and Used Tires.
- The Waste and Used Tire Hauler Program and Manifest System.
- Cleanup, Abatement, or Other Remedial Actions Related to Tire Stockpiles Throughout the State.
- Research Directed at Promoting and Developing Alternatives to the Landfill Disposal of Tires.
- Market Development and New Technology Activities for Waste and Used Tires.

Each element includes an overall chart of activities and describes each activity with associated budget information by fiscal year.

Enforcement and Regulations Relating to the Storage of Waste and Used Tires

Activity Description and Budget

The enforcement program will implement a two-pronged approach to statewide enforcement which will use local enforcement entities wherever possible and state resources in "gap" areas. The waste tire enforcement program will provide ongoing assistance to local jurisdictions and oversee the entire effort. Table 2 provides a list of activities and associated budgets for the Enforcement and Regulations Relating to the Storage of Waste and Used Tires Element.

Table 2: Budget for Enforcement and Regulations Relating to the Storage of Waste and Used Tires

Program Area	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
Waste Tire Enforcement Support Activities	$370,000	$370,000	$370,000	$370,000	$370,000
Enforcement Case Assistance	$50,000	$50,000	$50,000	$50,000	$50,000
Local Government Waste Tire Enforcement Grants	$7,000,000	$7,000,000	$7,000,000	$7,000,000	$7,000,000
Database System Maintenance and Enhancement	$415,000	$165,000	$165,000	$165,000	$165,000
Totals	**$7,835,000**	**$7,585,000**	**$7,585,000**	**$7,585,000**	**$7,585,000**

1. **Waste Tire Enforcement Support Activities:** This line item has changed over time based on needs and lessons learned. It combines several activities and agreements that will support the overall mission of enforcing the laws regarding the hauling and disposal of waste and used tires in the State of California and along the California/Mexico border region and illegal activities related to export of tires through California ports. This combined activities approach will provide flexibility with respect to program funding for each activity. Funds will be allocated to the following projects:

   - **California Highway Patrol (CHP) Agreement to Support Enforcement Activities:** In fiscal year 2011/12 CHP was unable to enter into an agreement due to staffing issues. In mid-2012 CalRecycle renewed this agreement so the CHP will continue to support CalRecycle's field efforts in the areas of ground and aerial surveillance, covert and overt investigations, inspector security, training for state and local law enforcement officers, and roadside checkpoints to assist CalRecycle as well as local enforcement personnel. If the CHP is unable to continue this work due to budget or priority issues, CalRecycle will pursue a similar agreement with other law enforcement agencies. This effort includes a surveillance and enforcement support focus on illegal activities related to tire exports through California ports and in the California/Mexico border region.

   - **Satellite Surveillance Project:** CalRecycle had two contracts that used satellite imagery to review and analyze large sections of land to determine whether the technology was useful and whether staff could generate such maps quickly and easily in-house. The technology was useful in finding tire piles located in remote and isolated areas of Central and Northern California having limited visual access and the large desert regions in Southern California including the California/Mexico border region. However, use of the technology requires use of highly trained and skilled aerial photo interpreters, so the Board (now

CalRecycle) directed staff to consider future contracts if/when the technology is more readily usable by staff.

- **Air Resources Board (ARB) Surveillance Assistance:** In Fiscal Year 2011/12 ARB was unable to enter into an agreement with CalRecycle. CalRecycle is working to resolve the issues and enter into a new agreement with ARB. This activity supports field investigative efforts by CalRecycle and local enforcement waste tire grantees. The ARB has extensive experience in assisting other agencies in the purchase, maintenance, monitoring, and use of both covert and overt surveillance equipment. ARB's expertise has aided and should continue to aid CalRecycle and local waste tire grantees in their efforts to deter, or find and prosecute those individuals who illegally haul or dispose of tires and illegal activities related to tire exports through California ports. Additionally, work should be done toward procuring more sophisticated surveillance equipment for covert activities allowing real-time remote monitoring and sensing.

- **Analysis of Targeted Study Areas for Waste Tire Enforcement:** Provide site/topic specific studies that target issues relating to the enforcement of used and waste tire laws in California. This activity will provide CalRecycle with the flexibility to respond to situations that arise, which may not have been previously under consideration. For instance, Senate Bill 772 (Ducheny, Chapter 214, Statutes of 2005) required the Board (now CalRecycle) to track the flow of both legal and illegal waste and used tires through the California/Mexico border. *Note: The California/Mexico border tire flow report was completed and there are no plans to do another report at this time.*

- **Training Support for Waste Tire Enforcement Inspectors and Managers**: This activity continues work with law enforcement to provide comprehensive and up-to-date training that focuses on tire enforcement and environmental compliance in support of training for both law enforcement and grantees. In addition, funds will be used to supplement the tire portion of CalRecycle's annual enforcement conference for local agencies. Training provides inspectors and managers with up-to-date information on CalRecycle's waste tire management programs and grants, as well as a venue to network and discuss other items of interest. Other outreach activities may also be held during the year.

- **Attorney General's Assistance for Tire Enforcement Issues:** Starting in FY 2012/13 CalRecycle entered into a pilot agreement with the Attorney General's office to assist with tire enforcement cases. These cases primarily relate to tire exports from California ports. CalRecycle will evaluate the results of the pilot project.

Activity Funding
FYs 2013/14-2017/18……. $370,000 per fiscal year

2. **Enforcement Case Assistance:** CalRecycle's Legal Office generally prosecutes administrative enforcement penalty actions to ensure uniformity of enforcement and to expedite processing. However, criminal and certain civil enforcement cases must be referred to the attorney general's office or local district attorneys' offices. Unfortunately, some rural jurisdictions do not have the resources to handle waste tire misdemeanor cases. In fiscal year 2001/02, CalRecycle established a two-year pilot program with the California District Attorneys Association to assist these jurisdictions. While the pilot project proved successful early on, recently the California District Attorneys Association has not been able to utilize the funding provided. Therefore, CalRecycle will no longer fund work with the California District Attorneys Association. CalRecycle will continue to work with authorized enforcement organizations as contractor(s) or grantee(s) for investigative and prosecutorial services to pursue criminal or civil enforcement actions including enforcement actions related to tire exports from California ports.

Activity Funding
FYs 2013/14- 2017/18……..……..$50,000 per fiscal year

3. **Local Government Waste Tire Enforcement Grants:** PRC section 42889(d) allows CalRecycle "to consider designating a city or county, or city and county as the enforcement authority of regulations relating to the storage of waste and used tires." This section also states that if CalRecycle designates a local entity for this purpose, it must provide sufficient, stable, and noncompetitive funding to that entity, based on available resources.

   The purpose of this grant program is to enhance the statewide waste tire enforcement infrastructure in California. This grant program will augment CalRecycle's enforcement efforts in overseeing the proper management and flow of waste tires throughout the state. Eligible county and city jurisdictions can use these grant funds to identify waste tire sites, conduct waste tire facilities inspections, investigate illegal tire disposal activities, review waste tire hauler documents, issue Notice of Violations, and ensure that tire dealers, auto dismantlers, tire haulers, and others comply with all applicable laws, storage standards, and manifest requirements. The priorities for this grant program are to:

   - Offer a sufficient, stable, and non-competitive funding source;
   - Ensure consistent statewide inspection and enforcement coverage;
   - Ensure cost-effective and successful local waste tire enforcement programs;
   - Streamline the grant program application, annual renewal, and reporting process;
   - Conduct evaluations to assess grantee performance and enforcement program effectiveness.

   Participation in this grant program continues to increase. There were just eight grantees in FY 2001/02, and 47 in FY 2011/12. As a direct result of the waste tire enforcement grants, local agencies have a much more vital and expanded role in enforcement.

   Activity Funding
   FYs 2013/14-2017/18……..…….$7,000,000 per fiscal year

4. **Database System Maintenance and Enhancement:** CalRecycle developed the Waste Tire Management System (WTMS) to track tire enforcement and manifest program activities. The database system was developed per the requirements defined in the approved feasibility study report. The system tracks waste tire generators, registered haulers, permitted and unpermitted end use facilities, manifest forms, inspection forms, and enforcement actions.

   The system was initially released in July, 2003, and has continued to meet requirements through continued maintenance and enhancement at an annual cost of $165,000 per fiscal year. Areas of ongoing maintenance and enhancement include:

   - Standard reports to track facility inspections, waste tire storage permits, grantee referrals, and Notice of Violations to ensure performance measures are achieved.
   - Ongoing enhancements to compliance reports that assist grantees with inspection prioritization and planning.
   - Ongoing maintenance that includes revising inspection forms, entering into contracts to have inspections forms and other documents scanned and entered into the database on an ongoing basis.
   - Additionally, periodic upgrades to the system are anticipated as the program continues to grow and change to meet the needs of our internal and external stakeholders as well as reporting requirements requested by Cal/EPA.

   There have been substantial changes made to WTMS over the years to expand functionality and to reflect changes in the tire program business requirements. While WTMS meets the primary existing business needs of the program, the Information Technology Services Branch (IT Services) regularly evaluates existing

systems and their technology platform as part of an ongoing process to continually enhance the application development environment used for building automated systems at CalRecycle.

The current areas of focus for the WTMS business requirements assessment shows that substantial benefits could be realized by improvements in one or more these major areas:

- Paperless services for grantees to submit their mandated facility inspection data. This includes web-based services for receiving electronic data (batch EDT); mechanisms to ensure submissions are complete and accurate, and revised Survey and Inspection forms that are compatible with electronic data submission.
- Development of a web-portal for haulers to complete their waste tire hauler applications online, maintain their list of vehicles, and identify new facilities where they are conducting tire transactions.
- Improvements to existing waste tire manifest EDT portal would increase usability, provide a cleaner interface, and help generate the reports needed for compliance and accounting.
- Analysis of and evaluation of alternatives for addressing data integrity issues.
- Analysis of and evaluation of alternatives for reducing errors in data at the time of submission/upload.
- Reassessment of reporting capabilities.

These assessments, specifications, and possible enhancements will include appropriate documentation and review. Proof-of-concept demonstration systems will be developed, where possible, to demonstrate the proposed capabilities of any new or revised automated system.

Activity Funding

FYs 2013/14…….. .....$415,000

FYs 2014/15-2017/18…….. .....$165,000 per fiscal year

Waste and Used Tire Hauler Program and Manifest System

Activity Description and Budget

The Hauler and Manifest Program is a general line item budget as shown in Table 3 Budget for the Waste and Used Tire Hauler Program and Manifest System. The costs associated with this budget are printing and mailing of the Comprehensive Trip Log forms; training and educational materials; contracting with an outside source for data entry of the trip log forms; an Information Management Branch annual budget for manifest and hauler registration-related upkeep and maintenance of the Waste Tire Management System. Additionally, funds provide printing of the waste tire hauler decals and certificates as well as Tire Program Identification Number certificates.

Table 3: Budget for the Waste and Used Tire Hauler Program and Manifest System

Program Area	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
Hauler Program and Manifest System	$450,000	$450,000	$450,000	$450,000	$450,000
Totals	**$450,000**	**$450,000**	**$450,000**	**$450,000**	**$450,000**

1. **Hauler Program and Manifest System:** With Board (now CalRecycle) approval of the trip log form, the overall costs for the manifest program has been reduced as less printing, postage, and processing time is necessary. The numbers presented in Table 3 for "Hauler Program and Manifesting" adequately reflects this revision.

Activity Funding
FYs 2013/2014–2017/18……..…$450,000 per fiscal year

Cleanup, Abatement, and Remedial Action

Activity Description and Budget

The cleanup program will continue to remediate sites with CalRecycle-managed contractors and grants to local governments for amnesty events and cleanup of illegal piles. In addition, CalRecycle will provide funding to the Farm and Ranch Solid Waste Cleanup Grant Program to further mitigate future accumulations of waste tires. Also, CalRecycle will establish an emergency reserve account, which cannot exceed $1 million, as directed by SB 876. Table 7 provides a list of activities and associated budgets for the element titled "Cleanup, Abatement, or Other Remedial Actions Related to Tire Stockpiles throughout the State."

Table 7: Budget for Cleanup, Abatement, and Remedial Action

Program Area	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
Short-Term Remediation Projects	$300,000	$300,000	$300,000	$300,000	$300,000
Local Government Waste Tire Cleanup Grant Program	$0	$1,800,000	$0	$1,800,000	$0
Local Government Amnesty Grant Program	$1,800,000	$0	$1,800,000	$0	$1,800,000
Emergency Reserve Account	$500,000	$500,000	$500,000	$500,000	$500,000
Farm and Ranch Solid Waste Cleanup and Abatement Grant Program*	$400,000	$400,000	$400,000	$400,000	$400,000
Totals	**$3,000,000**	**$3,000,000**	**$3,000,000**	**$3,000,000**	**$3,000,000**

** Funds transferred to Farm and Ranch Solid Waste Cleanup and Abatement Grant Program.*

1. **Short-Term Remediation Projects:** PRC section 42846 allows the Board (now CalRecycle) to perform any cleanup, abatement, or remedial work required to prevent substantial pollution, nuisance, or injury to the public's health and safety at waste tire sites where the responsible parties have failed to take appropriate action. These efforts may include stabilizing piles until removal, removing all waste tires, and/or remediating the site after the tires have been removed. CalRecycle funds short-term remediation of illegal waste tire sites with CalRecycle-managed contracts. Funds allocated to remediation efforts may roll over from one fiscal year to the next. CalRecycle staff will continue to move aggressively to remediate the sites on the short-term projects list as they become known through enforcement actions or by other means.

   Activity Funding
   FYs 2013/14–2017/18 .....$300,000 per fiscal year

2. **Local Government Waste Tire Cleanup Grant Program:** Under this grant program, local governments including local enforcement agencies, county and city departments, fire districts, code enforcement agencies, irrigation districts, and qualifying American Indian tribes are eligible for funding. Grants are awarded to pay for the cost of cleanup, abatement, or other remedial actions related to the illegal disposal of waste tires. Sites addressed under the program typically include small nuisance piles (i.e., less than 500 tires) of illegally dumped tires on public property widely distributed throughout the applicant's jurisdiction. These small dispersed sites are not large enough or cost-effective to address using CalRecycle's statewide short-term remediation program.

Activity Funding
FYs 2014/15 and 2016/17.....$1,800,000 per fiscal year

2. **Local Government Amnesty Grant Program:** This grant program is designed to help divert waste tires from landfill disposal and prevent illegal tire dumping. California cities, counties, special districts, other political subdivisions and jurisdictions joined together by formal agreements, as well as qualifying American Indian tribes, are eligible to apply for these competitive grants. A waste tire amnesty event allows private citizens to take waste tires, in non-commercial quantities, to a specific location established by the local government administering the grant program. Based on FY 2009/10 application data, waste tire amnesty events are a cost-effective alternative for local governments when compared to the cleanup of illegally dumped tires. Per tire costs average $3.21 for amnesty events, while average cleanup costs under the waste tire cleanup grant program run in the neighborhood of $5.31 per tire.

   Activity Funding
   FYs 2013/14, 2015/16 and 2017/18.....$1,800,000 per fiscal year

3. **Emergency Reserve Account:** SB 876 required CalRecycle to create and maintain an emergency reserve account which shall not exceed $1 million. Funding for FYs 2013/14–2017/18 is proposed at $500,000. These funds will be used to respond to emergencies involving waste tires (e.g., tire fires). This emergency reserve account is subject to change depending on the need for emergencies that arise. While CalRecycle is required to maintain funds in this account with expenditure authority for emergency purposes, more than $1,000,000 may be expended on a yearly basis. If allocated funds are not expended, funds may be carried forward to the fund balance in the following fiscal year.

   Activity Funding
   FYs 2013/14–2017/18 .....$500,000 per fiscal year

4. **Farm and Ranch Solid Waste Cleanup and Abatement Grant Program:** Tire funds are transferred to the Farm and Ranch Solid Waste Cleanup and Abatement Grant Program to remediate solid waste that has been illegally dumped on farm or ranch properties. SB 876 requires that transferred tire funds be allocated to pay the costs of cleanup, abatement, or other remedial action related to the illegal disposal of whole waste tires on farm or ranch properties. Other non-tire cleanup costs are paid for using other program funding sources. This program cleans up sites that in the past have acted like a magnet for white goods, used oil, other trash, and waste tires. Cleaning these sites up will help deter future illegal dumping of old tires; therefore, annual funding is proposed to continue at $400,000 for this program.

   Activity Funding
   FYs 2013/14–2017/18 .....$400,000 per fiscal year

Research Directed at Promoting and Developing Alternatives to the Landfill Disposal of Tires

Activity Description and Budget

The research program will concentrate on activities that support increased use of rubberized asphalt concrete (RAC), tire-derived aggregate (TDA), and other tire-derived products (TDPs). This research will be conducted in three general areas: civil engineering applications using TDA, highway construction applications using rubber paving technologies, and non-highway technologies using waste tires. Table 8 provides the budget for the element titled "Research Directed at Promoting and Developing Alternatives to the Landfill Disposal of Tires."

T*able 8: Budget for Research Directed at Promoting and Developing Alternatives to the Landfill Disposal of Tires*

Program Area	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
Research on Applications and Technologies for Waste Tires	$1,000,000	$500,000	$500,000	$500,000	$500,000
Totals	**$1,000,000**	**$500,000**	**$500,000**	**$500,000**	**$500,000**

1. Research on Applications and Technologies for Waste Tires: This activity will fund projects in the following categories:

- ***Civil Engineering Applications using Tire-Derived Aggregate:*** CalRecycle has made significant progress promoting the use of TDA in civil engineering applications; in fact, CalRecycle has successfully partnered with both state and local governments to complete projects that have demonstrated the performance and cost effectiveness of TDA. These partnerships helped create advocates who are committed to using TDA in future projects and who will also help promote CalRecycle's marketing efforts by getting others to use it. Although CalRecycle considers TDA as one of the top priority marketing targets for diverting waste tires from landfills, there is still much work that needs to be done to establish this use of waste tires as an accepted material.

  Under this activity, CalRecycle will continue to investigate new civil engineering uses for waste tires, including partnering with state, local, and private-sector engineers to conduct research and educate them on the use of TDA in these projects. For research projects focusing on specific civil engineering uses of waste tires, project-specific contracts may be implemented. These projects could include, but are not limited to, erosion control, earthquake damping, vibration mitigation, retaining and sound walls, storm water runoff/drainage control, and septic tank leach field applications.

- ***Highway Construction Applications Using Rubber Paving Technologies:*** CalRecycle continues to make significant progress in promoting RAC and as a result, its use continues to increase statewide. Research of rubber paving applications has played a key role in CalRecycle's outreach efforts. For example, CalRecycle has recently completed a life-cycle cost study that reaffirmed that rubberized asphalt paving is a cost-effective alternative to conventional paving. In addition, CalRecycle is investigating the viability of integrating recycled rubber pavement into new pavement.

  However, as this technology continues to evolve, there are several new applications that CalRecycle will continue to study to gain additional information regarding their benefits and drawbacks. Some of these applications may include new developments in: rubberized hot mix, and rubberized chip and slurry seals. Under this program element, CalRecycle will research and if necessary conduct pilot studies for these applications in order to evaluate their performance and cost benefits.

If the ongoing research supports the benefits of these applications, CalRecycle then can market and promote the use of these applications by including them in future grant offerings, with the aim of enhancing sustainable markets for additional waste tires. Additionally, CalRecycle staff will evaluate current design standards and investigate pavement preservation strategies that use rubber and increase the lifespan and performance benefits (e.g., resistance to reflective cracking, skid resistance, noise reduction) of pavements. However, improvements in mix design and range of use are continuously evolving and may warrant further investigation.

- ***Research on Non-Highway Technologies Using Waste Tires:*** CalRecycle will continue to investigate non-highway related technologies that utilize waste tires to study and determine whether they are viable in the current tire market and if there are health and safety impacts that could adversely impact their use. Some of these applications may include: identification of human health and environmental risks associated with TDPs; feasibility of using crumb rubber in molded and extruded products; partner with universities, state agencies, and the U.S. Environmental Protection Agency to conduct research on new products and applications derived from waste tires; and conduct a study to compile tire-derived product performance and cost information.

Activity Funding

FY 2013/14……..$1,000,000

FYs 2014/15–2017/18…….....$500,000 per fiscal year

Market Development and New Technology Activities for Waste and Used Tires

Activity Description and Budget

The Market Development Program is focusing on RAC, TDA and TDPs that use the largest number of tires. Since the largest number of tires can be diverted through RAC and TDA applications, significantly more resources are being devoted to them. To assure that TDP businesses can meet the demand, the business assistance program will work closely with the industry to expand existing businesses and attract new ones. Table 9 provides the budget for this element.

Table 9: Budget for Market Development and New Technology Activities for Waste and Used Tires

Program Area	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
TDA Civil Engineering Technical Support	$1,000,000	$500,000	$0	$500,000	$500,000
TDA Grant Program	$1,700,000	$1,600,000	$1,600,000	$1,600,000	$1,600,000
TDA Technology Center and Laboratory Testing Services	$100,000	$100,000	$100,000	$100,000	$100,000
RAC Technical Assistance Contract	$0	$500,000	$1,000,000	$500,000	$500,000
Rubberized Pavement Grant Program	$3,000,000	$3,000,000	$3,000,000	$3,000,000	$3,000,000
TDP Grants and Tire Rebate/Incentive Program	$2,931,675	$3,781,675	$3,781,675	$3,781,675	$3,781,675
Tire Outreach and Market Analysis	$500,000	$500,000	$500,000	$500,000	$500,000
Tire Events	$75,000	$75,000	$75,000	$75,000	$75,000
Totals	**$9,306,675**	**$10,056,675**	**$10,056,675**	**$10,056,675**	**$10,056,675**

1. **Tire-Derived Aggregate Civil Engineering Technical Support:** Technical support is an important component of the success of the RAC grant program and CalRecycle will provide similar technical support and education to grantees as a component of the TDA grant program, using a new technical assistance contract component. This technical support may address issues associated with the use of TDA in civil engineering projects. Typical projects may include applications such as lightweight fill, landfill applications, and vibration damping layers in light-rail projects.

   The technical assistance contract component will also promote the use of TDA through a technical marketing and education outreach plan. This will be accomplished by the technical assistance contractor through: video documentation and assisting the Office of Public Affairs in the coordination of media events of TDA demonstration projects. The technical assistance contractor will also develop technology transfer materials that showcase the performance and cost benefits of using TDA. The technical assistance contractor will present these materials and serve as a CalRecycle liaison at various key stakeholder group workshops and conferences.

Activity Funding
FY 2013/14…….……$1,000,000
FYs 2014/15 and 2016/17-2017/18……...…….$500,000 per fiscal year

2. **Tire-Derived Aggregate Grant Program:** The TDA Grant Program builds on the success of numerous TDA demonstration projects and the RAC Grant Program. The program provides funding to local governments, public entities and private businesses for civil engineering projects utilizing TDA. To be eligible for the grants, projects must use TDA in one of a variety of approved civil engineering applications.

   Activity Funding
   FY 2013/14 .....….. $1,700,000
   FYs 2014/15–2017/18 .....….. $1,600,000 per fiscal year

3. **Tire-Derived Aggregate Technology Center and Laboratory Testing Services:** CalRecycle will continue its technical outreach efforts by continuing its contract with a contractor that has knowledge and experience with using TDA and RAC in California. Through the TDA Technology Center, the contractor will provide statewide technical assistance to local governments through direct consultation and presentations at local and regional workshops. To assure compliance with material specifications, the contractor will also provide validation testing services in support of CalRecycle RAC and TDA projects.

   Activity Funding
   FYs 2013/14–2017/18……$100,000 per fiscal year

4. **Rubberized Asphalt Concrete Technical Assistance Contract*:*** The success of CalRecycle's RAC programs has been due in part to the technical support that has been provided through CalRecycle's RAC technical assistance contract. The contractor will continue to provide technical support and education to local government grantees and CalRecycle under a new technical assistance contract. This technical support may address issues associated with roadway projects, including rubber hot-mix, rubber chip seal, rubber cape seals, and other emerging paving applications that use tire-derived materials that have been determined by CalRecycle to have benefits derived from the use of scrap tires. The technical assistance contractor will also serve as the liaison at various stakeholder workshops and conferences that will help promote RAC programs.

   The contractor will also assist CalRecycle in developing and implementing a cooperative purchasing program to address obstacles to wider use of RAC by local agencies. For example, rural local government agencies typically have smaller paving budgets and are not located in close proximity to RAC facilities. Because these constraints would result in smaller projects and higher transportation costs, rural agencies are frequently unable to use the product. However, all local government agencies, regardless of the size for their paving budgets will benefit from the cost savings provided by a cooperative purchase project. Through this program, the contractor will coordinate the participating agency projects and provide design assistance, specification review, bidding/procurement, construction management, quality assurance, and quality control. In addition, the contractor will provide training to each participating agency so that they can carry out future cooperative purchase projects on their own.

   The technical assistance contractor will also assist CalRecycle with marketing and promoting the use of RAC. This will be accomplished through the development and distribution of technology transfer materials that showcase the benefits of using RAC. The technical assistance contactor will present these materials and serve as a liaison at various key stakeholder group workshops and conferences.

Activity Funding
FYs 2014/15 and 2016/17-2017/18…….……$500,000 per fiscal year
FY 2015/16…..…….……..……..……$1,000,000

5. **Rubberized Pavement Grant Program:** This successful program will continue to be offered to local governments. The program is designed to assist in creating long-term sustainable markets by focusing on first-time and limited experience users of rubberized paving.

   Activity Funding
   FYs 2013/14-2017/18……...……..…$3,000,000 per fiscal year

6. **Tire-Derived Products Grants and Tire Rebate/Incentive Program:** The TDP Grant Program, and its predecessors, has provided financial support to encourage market development for similar products for nearly 20 years. The program has increased demand for TDPs and encouraged the appropriate substitution of recycled rubber for virgin rubber (also known as "feedstock conversion"). The program has also been instrumental in supporting the success of many TDP-related businesses. At the same time, stakeholders have commented on the general need to further strengthen market demand, although there is no consensus on how to best do so. As one part of its efforts to address this, CalRecycle proposes to continue the TDP Grant Program through fiscal year 2013/14 and then transition to a pilot rebate/incentive program in fiscal year 2014/15. CalRecycle will conduct the rebate/incentive pilot program for three to five years, evaluate its effectiveness, and assess whether to modify and/or continue the program.

   CalRecycle is proposing two different components in this pilot program. First, a retailer rebate aspect (first described as a potential program in the previous Five-Year Plan) would focus on: 1) a business-to-business and/or retail sector rebate/incentive program aimed at expanding commercial and consumer demand for tire-derived products; and 2) an incentive to produce TDA conditioned on ensuring improvement in the ability of participating processors to increase future TDA production.

   The business-to-business aspect of the pilot will include a variety of TDP and feedstock conversion products such as, but not limited to, flooring underlayment, rubberized flooring, conveyer belts, agricultural harvesting devices, asphalt roofing shingles, or other conventional rubber products. The retail sector focus will include, but is not limited to, landscaping and garden products such as mulch, paving stones, borders, planters, etc.; building and home products such as floor mats, molding, flooring underlayment, garage flooring, paint and coatings, etc.; and, contractor-related products such as traffic cones, delineators, spacers, barricades, fencing, etc.

   Some of the allocated funding may also be used for contracts to increase commercial and/or consumer awareness of TDPs and/or to leverage a co-operative advertising campaign by participating businesses and/or retailers. This could include local/regional ad (print/electronic/Internet) placement, point of sale displays, and other effective marketing efforts.

   Second, support for TDA projects is a priority for CalRecycle since this particular reuse has the potential to divert large numbers of tires from our landfills. However, one of the barriers to creating a long term sustainable market for TDA is the lack of an adequate supply for the projects that CalRecycle currently promotes (i.e., slope stabilization, retaining wall backfill, vibration attenuation in light rail, etc.). One way to address these barriers is to increase TDA production. Several processors currently produce or have the ability to produce TDA at the required specifications. However, the ability to quickly and efficiently change production from the products they are currently producing (i.e., mulch or crumb) to TDA and consistently meet specification has been a challenge for processors.

   To address this challenge, CalRecycle would provide an incentive payment based on the tons of product produced for approved projects using TDA, with the condition that the processor in turn invest in new

equipment (e.g., conveyors, shredders, blades, etc.) and supplies that facilitate its subsequent ability to respond to TDA demand in a timely manner.

Activity Funding
FY 2013/14……..…….…….……...$2,931,675
FYs 2014/15-2017/18.…….……..…….…..$3,781,675 per fiscal year

7. **Tire Outreach and Market Analysis:** This program is intended to document market trends and conduct focused technical outreach to public and private procurement entities to increase demand and expand the use of waste tire-derived material in a variety of applications including higher value-added products.

   Staff and an independent contractor will provide:
   - Outreach, education, and promotion of TDPs to federal, state and local governments, school districts and private entities that are in a position to procure TDPs or have the authority to specify them in future projects. This includes monitoring and measuring the outcome of these efforts, conducting meetings, trainings, and webinars to targeted stakeholders, maintaining and updating outreach materials, conducting product testing and approvals, and conferring with industry stakeholders to develop partnerships toward strengthening and expanding the TDP marketplace.
   - An annual market analysis resulting in the California Waste Tire Market Report. This effort consists of a market analysis study to assess the market for California waste tires and influencing factors in the market, including providing information on the waste tire diversion rate, market trends, supply/demand balance, and other relevant market analyses.
   - Collaboration with waste tire and TDP stakeholders to analyze and respond to emerging influences upon the waste tire market, potential avenues for increasing waste tire diversion, and TDP market expansion opportunities to support growth in the industry as a whole.

   Annually $350,000 will be spent on focused outreach, education and promotion, and $150,000 will be spent on the market analysis.

   Activity Funding
   FYs 2013/14-2017/18……..……..$500,000 per fiscal year

8. **Tire Events:** CalRecycle will continue to hold tire workshops, forums, and/or trainings, as it has in past years. These tire business/product events will provide attendees with up-to-date information about waste tire management programs. They provide a venue to discuss all aspects of waste tire management, including hauling, manifests, cleanup, proper disposal, recycling technologies, and research and market development activities. These events also offer a venue for staff and stakeholders to meet and focus on issues of common concern. Wherever possible, events will be conducted in conjunction with related events organized by organizations such as the League of California Cities, California Public Works Association, California State Association of Counties, etc. In addition, staff has combined the Tire, Used Oil/Household Hazardous Waste, and Recycling Market Development Zone Conferences and Training Workshops into one combined three-year contract to provide efficiencies of scale and other benefits**.** All events also will be coordinated with CalRecycle's Office of Public Affairs.

   Activity Funding
   FYs 2013/14-2017/18……..$75,000 per fiscal year