

Economic and Fiscal Impact Statement – Appendix A

Recycling and Disposal Reporting System Regulatory Update

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Background

The formal rulemaking process requires the submission of STD 399, the Economic and Fiscal Impact Statement. In this appendix, the Department of Resources Recycling and Recovery (CalRecycle) provides the calculations that gave rise to individual answers. Where individual answers require more thorough explanations, please see Appendix B.

As mentioned in the Initial Statement of Reasons, the Recycling and Disposal Reporting System (RDRS) is created by California Code of Regulations, Title 14, Sections 18815.1 through 18815.13. Updates to the RDRS regulations involve three groups of changes: 1) updates due to [Senate Bill \(SB\) 343 \(Allen, Chapter 507, Statutes of 2021\)](#); 2) updates due to [Assembly Bill \(AB\) 881 \(Gonzalez, Chapter 501, Statutes of 2021\)](#); and 3) other changes to improve existing regulations based on [AB 901 \(Gordon, Chapter 746, Statutes of 2015\)](#).

SB 343 regulates the use of the chasing arrows symbol and other similar recycling labeling. The statute requires RDRS to gather information on what material types and forms are actively recovered by facilities and how that material was collected. Collection of this information is not fully captured by existing RDRS regulations, which necessitated the proposed regulatory changes.

AB 881 classifies the export of mixed plastic materials as disposal, where mixed plastic refers to mixtures of materials containing polyvinyl chloride (resin code #3), low-density polyethylene (LDPE, #4), polystyrene (PS, #6), and other plastic (#7). AB 881 requires CalRecycle to collect jurisdiction of origin information for mixed plastic waste that is exported. RDRS regulations do not currently capture that reporting. Thus, the regulations needed to be updated.

AB 901 empowered CalRecycle to collect granular information about the operations of disposal, recycling, compost, and transfer/processor facilities, as well as exporters, brokers, and transporters of waste and recyclables. To do so, AB 901 regulations created RDRS. Reporting in RDRS began in the third calendar quarter of 2019. After a few years of this reporting, CalRecycle has determined several instances where existing regulations could be amended to either clarify regulations or improve the quality of the collected data.

Note that in this Appendix A, CalRecycle does not provide costs separately for the changes due to AB 881, SB 343, and general updates. Rather, costs are summarized across all three groups. In Appendix B, costs are provided separately for the three groups. Wages and costs always refer to US dollars (\$). Wages are always per hour. Within this Appendix A, if a table contains grand totals, then the sum of the values in the table may not exactly match the grand total, since individual values were rounded after calculating the grand total.

Economic Impact Statement

A. Estimated Private Sector Cost Impacts

A.1. Areas of Impact

The proposed regulations will impact businesses in the waste and recycling collection and processing industries. Specifically, the regulations will require altered reporting behavior by entities within RDRS. The regulations will also require sharing of information among reporting entities. These entities contain businesses, small businesses, and government-operated facilities. Consequently, the updated regulations will impact businesses, small businesses, and jobs. They will also impose reporting requirements.

Note that while the updated regulations do impose additional costs on Californian entities, these costs are unlikely to reduce the businesses' competitiveness relative to facilities outside of California. The costs imposed will be a relatively small portion of a facility's operational costs. Further, many of the facilities within California must operate in California (for example, transfer/processors and landfills that need to be close to the source of waste materials).

A.2. Total Economic Cost

To estimate total economic cost, CalRecycle calculated the cost of the regulations for each group of regulatory changes, for each affected entity type in the RDRS regulations (i.e., self-haulers, contract haulers, transfer/processors, disposal facilities, recycler/composters, and broker/transporters). CalRecycle then summed these costs. Costs included three components: gathering data and potentially transferring it to other entities, reporting information in RDRS, and training. To calculate each cost, this basic equation was used: (wages per hour) *multiplied by* (hours to satisfy new regulatory requirements per entity) *multiplied by* (number affected entities) *multiplied by* (number of quarters until regulations have been fully effective for one year). Wage estimates came from the California Employment Development Department (EDD). CalRecycle estimated hours to satisfy new regulatory requirements using a survey of affected stakeholders. Number of affected entities came from the number of reporting entities in RDRS and the number of non-reporting, but still affected, entities estimated in the original RDRS rulemaking for AB 901. CalRecycle determined the number of quarters based on implementation dates in the regulations. Putting all these numbers together, CalRecycle estimated a total cost of \$8,547,278. Table 1 shows the total cost for gathering/transferring data, reporting in RDRS, and training.

Table 1: The total cost for the new regulations for each of three cost components.

Cost Group	Cost (\$)
Gathering/Transferring	8,016,120
Reporting	379,543
Training	151,615
Total	8,547,278

For further information on how these specific costs were calculated, such as the hours used for each new regulatory requirement and the wages estimated for each activity type, please see Appendix B. Note that the total cost of the regulatory changes likely over-estimates the true value. For example, the analysis assumes that the updated regulatory requirements related to recycler/composters and jurisdiction of origin (i.e., that recycler/composters can pass along origins for materials sent to other facilities) are required, rather than optional. CalRecycle could have assumed that no entity would implement an optional regulation, but instead CalRecycle assumed that all entities would implement all optional regulations.

A.3. Businesses Impacted

Total Businesses

The RDRS regulations will impact businesses – within industries related to waste and recyclable material management (Table 2) – by requiring that those facilities either report in RDRS or pass along information to other entities. To assess the former, CalRecycle used [RDRS Public Report 0](#), finding that there were 1,272 operations required to report in RDRS as of 23 September 2022. This number excludes facilities that are inactive, exempt from RDRS reporting, or provisional (created by other reporting entities in RDRS). CalRecycle excluded inactive and exempt entities because these entities do not bear reporting or data transfer costs. CalRecycle excluded provisional facilities because it cannot be evaluated whether these facilities should be reporting in RDRS or if they are instead registered incorrectly (e.g., a provisional “reporting entity” might actually refer to an end user, who would thus be exempt from the RDRS regulatory requirements). These approximately 1,300 entities will be subject to data transfer requirements in addition to reporting in RDRS. However, the RDRS regulations will affect more than 1,300 entities because of contract haulers, many of whom do not report in RDRS but do have data transfer requirements. In the AB 901 2018 Rulemaking, CalRecycle estimated that approximately 1,000 contract haulers would be subject to the RDRS regulations (please see the attached 2018 STD 399). Because the regulatory updates have not changed who is subject to the regulations, CalRecycle elected to use the 1,000 number here. Thus, in total, it is estimated that the regulatory updates will affect approximately 2,300 operations, including both facilities run privately and those operated by a government agency. Note that this

number is not the same as the number of entities that is used in Appendix B when calculating costs because not all regulatory changes apply to all entities.

Table 2: *The industries that the RDRS regulations will affect, grouped by the North American Industry Classification System (NAICS).*

NAICS Industry Name	NAICS Code
Solid Waste Collection	562111
Solid Waste Landfill	562212
Solid Waste Combustors and Incinerators	562213
Other Nonhazardous Waste Treatment and Disposal	562219
Other Waste Collection	562119
Materials Recovery Facilities	562920
Recyclable Material Merchant Wholesalers	423930
Sewage Treatment Facilities	221320

Small Businesses

According to [Government Code 11346.3\(b\)\(4\)\(B\)](#), for the purposes of the Economic Impact Statement, small businesses 1) are independently owned and operated, 2) are not dominant in their field, and 3) have fewer than 100 employees. Thus, to estimate the number of small businesses, CalRecycle would need information about each of these criteria. Dominance in a field is difficult to define, especially for waste and recyclable materials collection services, which may operate monopolies on local scales. Further, CalRecycle does not have access to any readily available and current sources that would allow for determining whether a business is “independently owned and operated.” CalRecycle therefore relied on the determination in the original AB 901 RDRS rulemaking, which estimated that 33% of businesses were “small” (please see the attached 2018 STD 399).

A.4. Businesses Created and Eliminated

The proposed regulations will neither create nor eliminate businesses. CalRecycle contends that the regulations will not create businesses because the regulations increase existing reporting requirements for operations within the waste and recycling industries. Increased reporting in RDRS should not motivate individuals to create new businesses. For different reasons, the altered regulations should also not eliminate businesses. In the Estimated Costs section of this Appendix A (Section B., below), CalRecycle estimates the average costs to individual businesses. These costs vary by RDRS activity type (e.g., broker/transporter versus disposal), but the annual costs to businesses are all estimated to be less than \$7,000. And the weighted average of annual costs per business is less than \$4,000. It seems unlikely that an annual increase in expenditures of less than \$7,000 will be the single or primary reason that any business ceases operations.

A.5. Geographic Extent of Impacts

Facilities within the waste and recycling industries operate throughout California. The proposed regulations will therefore affect entities statewide.

A.6. Jobs Created

To estimate the number of jobs that the updated regulations may create, CalRecycle divided the estimated annual, *ongoing* cost of the regulations (see Subsection Annual Ongoing Costs within Section B.1. of this Appendix A) by wages per hour and hours per year. CalRecycle assumed that a year contained 2,080 hours (52, 40-hour weeks). This method assumes that none of the additional work will be accomplished with existing staff resources. According to Table 3, the updated regulations may produce up to 70 new full-time annual positions.

Table 3: For each RDRS activity type, the total estimated number of full-time equivalent positions created by the regulatory updates: Cost / Wage / Year Hours = Positions.

Activity	Cost (\$)	Wage (\$)	Year Hours	Positions
Broker/Transporter	223,740	55	2,080	2
Contract Hauler	1,564,836	52	2,080	14
Disposal	920,075	65	2,080	7
Food Waste Self-Hauler	416	52	2,080	0
Recycler/Composter	3,563,376	61	2,080	28
Transfer/Processor	2,123,220	55	2,080	19
Total				70

A.7. California Competitiveness

While the updated RDRS regulations do impose costs on operations within California, these costs will likely not reduce competitiveness of California facilities for several reasons. First, transporting waste and recyclables is expensive. These regulations and their corresponding costs will likely not increase costs enough to make disposing trash at out of state landfills or selling recyclables to out of state recovery facilities cost-effective. Second, material generated in California must, by definition, be handled by an entity in California to move out of California. This California handler, even if replaced by a corporation based out of another state, would have to report in RDRS. Thus, the updated reporting requirements for haulers and broker/transporters will not reduce the competitiveness of California-based operations relative to out of state facilities because the out of state facilities, if they operated in California, would bear the same reporting burdens as the facilities headquartered in California.

B. Estimated Costs

B.1. Initial, Annual, and Lifetime Costs

The STD 399 requires estimates for initial, annual, and lifetime costs of the regulations for individuals, small businesses, and typical businesses. The regulatory updates do not impose costs on individuals, so CalRecycle does not provide estimates for that field. When estimating costs for businesses, CalRecycle does not provide separate costs for small and typical businesses. The regulatory updates impose costs through data collection, transfer, and reporting requirements. Small businesses may therefore incur different costs than other businesses if small businesses require more or less time to satisfy the proposed regulatory changes, or if small businesses have different wages than other businesses. However, CalRecycle does not have estimates of time and wages specific to small and other businesses. Nor does CalRecycle have any reason to assume that small businesses would have significantly different values for time and wages than other businesses. Consequently, it is assumed that small businesses would incur similar costs as other businesses.

Initial Costs

When estimating initial costs, CalRecycle included only the cost of training to comply with the regulatory updates. The regulatory updates will not require entities to invest in new equipment or any one-time costs besides training. CalRecycle assumed that the only determining factors for training cost would be hours and wages. CalRecycle saw no reason to assume that small businesses would have different hourly training requirements or labor wages than other businesses. Thus, for each activity type, the total training cost was the product of the number of entities, hours to train per entity, and wages per hour. From these total costs, CalRecycle calculated the training cost per entity per activity type (Table 4), which was Cost divided by Number Entities within each activity type. CalRecycle used the Cost Per Entity values to calculate an average cost per *operation* (across all RDRS activity types) by weighting the Cost Per Entity values according to each RDRS activity's proportion. For example, Broker/Transporters are 3.47% of all entities. CalRecycle therefore multiplied the Cost Per Entity value by this percentage. This operation was repeated for all activity types and the total was summed, producing a weighted average initial cost per affected operation of \$120. Details on how CalRecycle calculated training costs for each RDRS activity based on number of entities, hours to train, and wages per hour are provided in Appendix B.

Table 4: For each RDRS activity, the total and per-entity estimated cost of a one-time training.

Activity	Number Entities	Cost (\$)	Cost Per Entity (\$)
Broker/Transporter	44	5,060	115
Contract Hauler	31	3,224	104
Disposal	149	19,370	130
Recycler/Composter	640	78,751	123
Transfer/Processor	404	45,210	112
Weighted Average			120

Annual Ongoing Costs

When estimating annual ongoing costs, CalRecycle included all costs except training (i.e., gathering or transferring data and reporting information in RDRS). As for the initial costs, it was assumed that costs would be determined by hours required to meet regulations and wages per hour. CalRecycle assumed that these numbers should vary by regulatory requirement and RDRS activity type, rather than by whether an entity is a small business. To estimate the average annual cost, CalRecycle calculated the annual cost excluding training per entity within each RDRS activity type. CalRecycle then averaged these per entity costs, weighting them by the number of entities in each activity type group (Table 5), producing an expected annual cost per affected operation of \$3,746. Details on how CalRecycle calculated costs for each RDRS activity, based on number of entities, hours to train, and wages per hour, are provided in Appendix B.

Table 5: For each RDRS activity, the total estimated annual cost.

Activity	Number Entities	Cost (\$)	Cost Per Entity (\$)
Broker/Transporter	44	223,740	5,085
Contract Hauler	1,000	1,564,836	1,565
Disposal	149	920,075	6,175
Food Waste Self-Hauler	4	416	104
Recycler/Composter	640	3,563,376	5,568
Transfer/Processor	404	2,123,220	5,255
Weighted Average			3,746

Total Lifetime Costs

As evidenced by the proposed rulemaking, reporting requirements may change periodically. Consequently, CalRecycle cannot know the actual lifetime of the proposed regulations. CalRecycle assumed 10 years in the calculations below. Thus, the lifetime cost of the regulations was the initial cost (\$151,615) plus the ongoing cost over 10 years (\$83,956,630): \$84,108,245.

B.2. Costs by Industry

Rather than NAICS code, in Table 6, CalRecycle provides the percentage of ongoing costs attributed to each RDRS activity type.

Table 6: *The percentage of the estimated total annual ongoing cost that will be associated with each RDRS activity type.*

Activity	Cost (\$)	Percentage
Broker/Transporter	223,740	2.7%
Contract Hauler	1,564,836	18.6%
Disposal	920,075	11%
Food Waste Self-Hauler	416	0%
Recycler/Composter	3,563,376	42.4%
Transfer/Processor	2,123,220	25.3%

B.3. Reporting Costs

All of the costs stemming from these regulatory updates in some way relate to reporting in RDRS (either training, collecting and transferring the needed data, or actually reporting). Previous sections of this Appendix A thus provide the cost estimates for reporting. See, for example, the Initial, Annual, and Lifetime Costs section above (Section B.1.).

B.4. Housing

RDRS is not associated with housing. The regulatory updates for RDRS will not impact housing.

B.5. Comparable Federal Regulations

There are no comparable Federal regulations. These regulatory updates are needed to clarify the reporting requirements created by SB 343 and AB 881. The regulatory updates also clarify existing RDRS regulations.

C. Estimated Benefits

Updates to the current AB 901 regulations for RDRS will improve CalRecycle's data regarding material type and collection method of recycled or otherwise recovered materials, jurisdiction of origin for solid waste, and jurisdiction of origin for exported mixed plastic. These datasets will help the public evaluate products pursuant to the labeling requirements of SB 343, as well as improve the information available to jurisdictions regarding their disposal and progress towards disposal mandates. Taken together, these datasets will shed light on disposal and recovery

material flows within California, improving CalRecycle's ability to create strategies for reducing statewide disposal and moving towards a circular economy. Note that these benefits are all intangible. CalRecycle has no way of estimating monetary values for these benefits. In this Appendix A, CalRecycle does note that the regulatory changes may produce up to 70 new full-time equivalent positions. If created, these jobs are likely to be added to existing businesses, since the regulations overall will not incentivize the creation of new businesses.

D. Alternatives

D.1. Alternatives Descriptions

When considering alternatives, CalRecycle grouped the regulatory updates into three categories: those related to SB 343, those related to AB 881, or general updates. CalRecycle considered the most reasonable alternative for each of the three groups and calculated the sum cost of that alternative. Within Section D.2. below, CalRecycle discusses the specific alternative that is used for each of the three groups. Within D.2., the Total Difference subsection sums the cost difference between the alternatives and the actual updated regulations across all considered alternatives.

D.2. Costs and Benefits of Alternatives

SB 343

SB 343 requires CalRecycle to update the RDRS regulations to obtain information about how recovered materials are collected. The updated regulations require all RDRS activity types to report on collection method. Rather than all activity types, CalRecycle could have required only transfer/processors to provide collection method in RDRS.

The primary benefit of this approach would be a lower overall cost to the regulations. Under this method, the costs would stem from: 1) contract haulers gathering and transferring collection method to transfer/processors; 2) transfer/processors gathering and reporting collection method and training to do so therein. Table 7 compares the cost of collection method by RDRS activity between the alternative and actual updated regulations. The alternative is \$2,204,071 fewer dollars than the actual proposed regulations.

Table 7: For each RDRS activity, the total estimated cost of the actual collection method updates versus the alternative.

Activity	Actual Cost (\$)	Alternative Cost (\$)	Alternative - Actual (\$)
Broker/Transporter	104,060	0	-104,060
Contract Hauler	316,836	312,000	-4,836
Disposal	416,455	0	-416,455
Recycler/Composter	1,678,720	0	-1,678,720
Transfer/Processor	955,460	955,460	0
Total	3,471,531	1,267,460	-2,204,071

CalRecycle rejected the alternative because other RDRS activities play a critical role in California's recovery infrastructure. Materials move in complicated and often unexpected ways within California's recycling infrastructure. Ignoring facilities besides transfer/processors would therefore lead to gaps in CalRecycle's understanding of who receives material for recovery and how that material was collected. Since SB 343 requires CalRecycle to obtain representative information about recovered materials in the state, it is contended that any alternative method that ignores activity types will not be as effective as the actual regulatory updates. Further, given CalRecycle's findings that the average business would not experience more than an additional \$7,000 cost per year due to all of the regulatory updates, it is argued that the data provided by the actual regulatory updates for collection method justify the cost. Note that food waste self-haulers are not included within Table 7 because this activity type will not report collection method in RDRS. Further, food waste self-haulers should not incur a cost to gather and pass along collection method to destination reporting entities. Food waste self-haulers are the generator of their hauled materials, so the entity should know how they generated the material.

AB 881

AB 881 requires CalRecycle to update the RDRS regulations to obtain the jurisdiction of origin for mixed plastic waste. The updated regulations require entities to transfer the jurisdictions of origin for mixed plastic waste or materials containing mixed plastic to destination entities, so that when the mixed plastic waste is exported, the exporting entity can report the origins in RDRS. Rather than requiring entities to transfer origins, CalRecycle could have allowed host assignment. That is, when an entity exported mixed plastic waste, CalRecycle could have allowed that entity to host assign the tons either to the jurisdiction in which the exporting entity was located or to the jurisdiction of the entity from which the exporting entity received the tons. Note that CalRecycle did not consider requiring *only* contract haulers to pass along origins because CalRecycle does not know the portion of ultimately exported mixed plastic waste tons that pass directly from a contract hauler to the exporting entity. If most exported tons are not received directly at the exporting facility from a contract hauler, then requiring *only* contract haulers to pass along origins would not meet the data needs of AB 881.

The main benefit of allowing host assignment would be a lower overall cost to the regulations. Under this method, the costs would stem from: 1) training on how to report origins in RDRS for entities that were not familiar with origins; 2) reporting origins in RDRS for exported mixed plastic waste. Costs to gather and pass along origins would not exist if all tons were host assigned. Table 8 compares the cost of mixed plastic origins by RDRS activity between the alternative and actual updated regulations. The alternative is \$4,769,520 fewer dollars than the actual updated regulations.

Table 8: For each RDRS activity, the total estimated cost of the actual mixed plastic waste origins updates versus the alternative.

Activity	Actual Cost (\$)	Alternative Cost (\$)	Alternative - Actual (\$)
Broker/Transporter	119,900	3,740	-116,160
Contract Hauler	1,248,000	0	-1,248,000
Disposal	464,880	0	-464,880
Recycler/Composter	1,885,327	11,407	-1,873,920
Transfer/Processor	1,079,650	13,090	-1,066,560
Total	4,797,757	28,237	-4,769,520

CalRecycle rejected the alternative because it would not provide a representative accounting of the origins of mixed plastic waste. While relatively few tons of mixed plastic waste are exported (~2500 tons per quarter from 2019 Q3 through 2022 Q1), allowing all entities to host assign would drastically skew the origins of exported mixed plastic waste. Given that tons cannot often be exported at the source of generation, most plastic waste will likely need to travel from the source of generation to the exporting entity. If plastic moves a large distance or moves among operations along the journey, then host assigning the tons will likely inappropriately determine the jurisdiction of origin. Note that the alternative cost of contract haulers and disposal facilities is \$0 because CalRecycle estimated costs based on the number of entities that have ever reported exporting mixed plastic waste in RDRS. No contract hauler or disposal facility has reported such outflows. Meaning, under the alternative scenario, in which costs stem from reporting exported mixed plastic waste in RDRS and training on how to do so, contract haulers and disposal facilities would have no costs.

General Updates

The proposed rulemaking updates the RDRS regulations in several ways beyond those related to SB 343 and AB 881. Briefly, these other updates expand data transfer for jurisdiction of origin, require materials to be reported when entities send outflows of mixed materials, require CalRecycle to approve alternative data gathering methods, and a few other non-substantive miscellaneous changes, such as correcting references and changes for grammar or clarity. The alternative for all these changes is the same: simply not implementing these changes. The cost of

this alternative is therefore zero and \$5,047,510 fewer dollars than the actual updated regulations (Table 9).

Table 9: For each RDRS activity, the total estimated cost of the other updates versus the alternative of no change.

Activity	Actual Cost (\$)	Alternative Cost (\$)	Alternative - Actual (\$)
Broker/Transporter	121,000	0	-121,000
Contract Hauler	1,251,224	0	-1,251,224
Disposal	522,990	0	-522,990
Food Waste Self-Hauler	416	0	-416
Recycler/Composter	1,952,000	0	-1,952,000
Transfer/Processor	1,199,880	0	-1,199,880
Total	5,047,510	0	-5,047,510

CalRecycle rejected the alternative of no change because the updates were necessary.

For origins, CalRecycle needs to expand reporting because several entities and jurisdictions have informed CalRecycle that the current RDRS regulations, which require host assignment, do not allow accurate tracking of disposed tons' true jurisdiction of origin. Further, the expanded requirements related to jurisdiction of origin are not requirements for all RDRS activities. For recycler/composters and broker/transporters, CalRecycle is not introducing a new required burden, but instead allowing for expanded detail in reporting behavior if the entity chooses to do so.

For the other changes, CalRecycle needs to increase detail on the information that is already collected. Currently, entities are allowed to send outflows of "mixed materials" materials. To meet the goals of [SB 1335 \(Allen, Chapter 610, Statutes of 2018\)](#), [SB 54 \(Allen, Chapter 75, Statutes of 2022\)](#), and SB 343, CalRecycle needs information about all outflows related to recovery, and outflows of "mixed materials" will not suffice. Thus, when entities send mixed material outflows, CalRecycle needs to require the list of materials that were present in that mixture. Likewise, CalRecycle needs to require reporting of an entity's Solid Waste Information System (SWIS) number, if an entity has one, because CalRecycle often needs to aggregate RDRS data by SWIS number. If CalRecycle does not have a SWIS number, then operational needs cannot be met. Lastly, the updated regulations require CalRecycle to approve methods other than what is allowed by regulation because CalRecycle has a vested interest in the quality of the data. Allowing entities to use methods without approval, as is currently the case, would prevent CalRecycle from ensuring appropriate data quality. Altogether then, CalRecycle determined that the alternative of no action would not enable CalRecycle to meet program goals and standards for RDRS data.

Total Difference

The total difference between cost of the actual proposed regulations and the single least-cost alternative is the sum of the difference reported in each of the previous three sections of this Appendix A, with one exception. Within *both* the AB 881 alternatives and the General Updates alternatives sections, when comparing the actual cost versus the alternative, CalRecycle included gathering and transferring origins in the cost of the proposed regulations. However, because the General Updates group includes the requirement to gather and transfer origins for *all* materials, not just mixed plastic waste, the cost of gathering and transferring origins for mixed plastic waste is included within the cost of gathering and transferring origins for all materials. Table **10** accounts for this double-counting in its summary of the actual cost, alternative cost, and total cost difference, \$7,251,581, across all alternatives.

Table 10: For each RDRS activity, the total estimated cost of all RDRS regulatory updates versus the considered alternatives.

Activity	Actual Cost (\$)	Alternative Cost (\$)	Alternative - Actual (\$)
Broker/Transporter	228,800	3,740	-225,060
Contract Hauler	1,568,060	312,000	-1,256,060
Disposal	939,445	0	-939,445
Food Waste Self-Hauler	416	0	-416
Recycler/Composter	3,642,127	11,407	-3,630,720
Transfer/Processor	2,168,430	968,550	-1,199,880
Total	8,547,278	1,295,697	-7,251,581

D.3. Potential Issues when Comparing Costs and Benefits

As CalRecycle is unable to estimate the monetary benefits of the actual updated regulations or the alternatives, CalRecycle cannot easily compare the benefits of the actual and alternative regulatory updates. Broadly, the alternatives considered would not provide sufficient detail in data collected within RDRS to meet statutory and CalRecycle program goals.

D.4. Performance Standards

The regulatory updates require entities to use particular methods to ascertain collection method. While these methods do not list desired outcomes and do not allow any method to be used, the regulatory updates allow several options from which entities may choose. By listing acceptable options, rather than listing the desired goal, CalRecycle simplifies compliance for reporting entities because entities do not need to seek CalRecycle's approval for a method that is listed. However, if an entity can justify that an alternative is appropriate, then they can do so pursuant

to the regulatory updates (i.e., California Code of Regulations, Title 14, Section 18815.9(m)).

E. Major Regulations

CalRecycle determined that the updated regulations would impose costs less than \$10 million. The benefits to the updated regulations are as described in the Estimated Benefits section of this Appendix A (Section C., above).

Fiscal Impact Statement

A. Fiscal Effect on Local Government

The updated regulations will impose costs on local governments that operate entities subject to the RDRS regulations. However, these costs are not reimbursable. Reimbursable costs are those that mandate a new program or higher level of service per Article XIII B, section 6 of the California Constitution. The proposed regulatory updates do not create a new program. Further, while the proposed regulations do expand reporting in RDRS, RDRS is not a service that local governments provide residents. In addition, courts have held that costs are not reimbursable if they are not unique to local governments (*County of Los Angeles v. State of California* (1987) 43 Cal.3d 46). The RDRS regulations as currently implemented and the proposed updates to the RDRS regulations apply both to local governments and private businesses. In fact, most RDRS entities are not operated by governments (Table 11).

Though the costs that the proposed regulations impose on local governments are not reimbursable, CalRecycle estimated these costs below. To estimate the additional costs that local governments may incur due to the updated regulations, CalRecycle determined whether a government agency operated each entity in RDRS. We used the contact emails associated with entities in RDRS, looking for ".gov," "gov.us," "ca.us", "city.us", and "county.us". Based on associated emails, CalRecycle estimates that 60 unique local governments operate 10.7% of all entities that report in RDRS (Table 11).

Table 11: For each RDRS activity, the number and percentage of government-run facilities.

Activity	Total Number Facilities	Number Government	Percentage Government
Broker/Transporter	44	0	0.0
Contract Hauler	31	0	0.0
Disposal	149	44	29.5
Food Waste Self-Hauler	4	0	0.0
Recycler/Composter	640	39	6.1
Transfer/Processor	404	53	13.1

To calculate costs to government-operated entities, CalRecycle simply multiplied the proportion of entities associated with governments by the cost. CalRecycle calculated this result separately for the initial cost (Table 12) and the ongoing annual cost (Table 13). The cost to government-operated entities in year one is the training cost plus the annual ongoing cost, \$814,668. The cost to government-operated entities in year two and year three is simply the annual ongoing cost, \$798,227. CalRecycle has no reason to assume that ongoing costs will increase or decrease in years two and three.

Within Table **12** and Table **13**, note that the portion of contract haulers that are government-run differs between the two tables. The portion is different because no registered contract haulers had government emails, and only registered contract haulers will bear training costs. For ongoing costs, registered and non-registered contract haulers will bear costs, and the original AB 901 rulemaking estimated that 2% of contract haulers overall were government-run (please see the attached 2018 STD 399).

Table 12: For each RDRS activity, the total estimated cost of training for government-run operations.

Activity	Percentage Government	Total Cost (\$)	Government Cost (\$)
Broker/Transporter	0.0	5,060	0
Contract Hauler	0.0	3,224	0
Disposal	29.5	19,370	5,714
Recycler/Composter	6.1	78,751	4,804
Transfer/Processor	13.1	45,210	5,923
Total			16,441

Table 13: For each RDRS activity, the total estimated ongoing annual cost for government-run operations.

Activity	Percentage Government	Total Cost (\$)	Government Cost (\$)
Broker/Transporter	0.0	223,740	0
Contract Hauler	2.0	1,564,836	31,297
Disposal	29.5	920,075	271,422
Food Waste Self-Hauler	0.0	416	0
Recycler/Composter	6.1	3,563,376	217,366
Transfer/Processor	13.1	2,123,220	278,142
Total			798,227

B. Fiscal Effect on State Government

CalRecycle staff who currently work on RDRS will implement the updates to RDRS and provide the training needed. CalRecycle anticipates that the main cost of the regulations to CalRecycle will stem from updating RDRS to gather the newly required information. However, the additional required information is not completely new conceptually. RDRS already collects origins and source sector, and the gathering of collection method will be similar to origins and source sector from a reporting perspective. Thus, we expect that CalRecycle will be able to update RDRS without additional resources, as part of the maintenance of existing systems. However, if that does not occur, then CalRecycle does not anticipate that development will take more than one Information Technology Associate position for one year (\$164,667, including overhead), funded out of the Integrated Waste

Management Account (IWMA). CalRecycle expects that there will be no costs for the second and third fiscal years beyond the normal maintenance of RDRS.

C. Fiscal Effect on Federal Funding of State Programs

The proposed regulations do not affect any federally funded State agency or program.