



LOS ALAMOS

County of Los Alamos

1000 Central Avenue
Los Alamos, NM 87544

BCC Agenda - Final

Environmental Sustainability Board

John Bliss, Chair; Sarah M. Terrill, Susan Barns, Rebecca Chamberlin, Erik Loechell, James Robinson, and Danny Katzman, Members

Thursday, September 15, 2016

5:30 PM

1000 Central Avenue, Suite 110

1. CALL TO ORDER - ROLL CALL

2. PUBLIC COMMENT

3. APPROVAL OF AGENDA

4. APPROVAL OF MINUTES

- A. [8598-16](#) Approval of the August 18, 2016, and August 30, 2016, Environmental Sustainability Board Minutes

Indexes:

Attachments: [A - Draft ESB Minutes August 18, 2016](#)
[B - Draft ESB Minutes August 30, 2016 Special Meeting](#)

5. BOARD BUSINESS

- A. [8600-16](#) Energy Sustainability and Carbon Neutrality of Los Alamos County Buildings - Presentation by Richard Dunn

Indexes:

- B. [8599-16](#) Update Regarding Special Meeting held on August 30, 2016 to Develop Presentation for the Brush and Bulk Item Collection Program Recommendation

Indexes:

- C. [8601-16](#) Environmental Sustainability Plan Status Update

Indexes:

Attachments: [D - Sustainability Plan Draft 2016](#)

6. REPORTS

A. Los Alamos Public School Subcommittee - Vacant

1. [8607-16](#) Los Alamos Public School Subcommittee Update

Indexes:**B. Chair's Report - John Bliss**

C. Board of Public Utilities Liaison - Sarah Terrill

D. Planning and Zoning Commission Liaison - James Robinson

E. Transportation Board Liaison - Rebecca Chamberlin

F. Parks and Recreation Board Liaison - Vacant

G. County Council Liaison - James Chrobocinski

7. STAFF REPORT

1. [8606-16](#) August 2016 Residential Sustainability Report

Indexes:

Attachments: [E - Residential Sustainability Report - August 2016](#)

2. [8608-16](#) Environmental Services Waste Sort

Indexes:

Attachments: [F - Waste Sort_Final Report_APRIL 2016](#)

8. PREVIEW OF UPCOMING AGENDA ITEMS**9. ADJOURNMENT**

If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact the County Human Resources Division at 662-8040 at least one week prior to the meeting or as soon as possible. Public documents, including the agenda and minutes can be provided in various accessible formats. Please contact the personnel in the Community Services Administration Office at 662-8163 if a summary or other type of accessible format is needed.



County of Los Alamos

Staff Report

September 15, 2016

Los Alamos, NM 87544
www.losalamosnm.us

Agenda No.: A.
Index (Council Goals):
Presenters:
Legislative File: 8598-16

Title

Approval of the August 18, 2016, and August 30, 2016, Environmental Sustainability Board Minutes

.Recommended Action Motion

I move that the Environmental Sustainability Board approve the August 18, 2016 and August 30, 2016, minutes as presented.

Or

I move that the Environmental Sustainability Board approve the August 18, 2016 and August 30, 2016, minutes as amended.

Body

Approval of the August 18, 2016, and August 30, 2016, Environmental Sustainability Board Minutes

Attachments

A - Draft ESB Minutes August 18, 2016
B - Draft ESB Minutes August 30, 2016



County of Los Alamos

1000 Central Avenue
Los Alamos, NM 87544

Minutes

Environmental Sustainability Board

John Bliss, Chair; Sarah M. Terrill, Susan Barns, Rebecca Chamberlin, Eric Loechell, James Robinson, and Danny Katzman, Members

Thursday, August 18, 2016

5:30 PM

1000 Central Avenue, Suite 110

1. CALL TO ORDER

The Board Chair, John Bliss, called the meeting to order at 5:30 PM.

The following members were in attendance:

Present: Member Bliss, Member Terrill, Member Katzman, Member Chamberlin

Absent: Member Robinson

2. PUBLIC COMMENT

Sandra West was recognized for her contribution to the ESB.

3. APPROVAL OF AGENDA

A motion was made by Member Chamberlin, seconded by Member Katzman, that the August 18, 2016 agenda be approved as presented.

The motion passed unanimously.

4. APPROVAL OF MINUTES

[8517-16](#) Approval of the July 21, 2016, Environmental Sustainability Board Minutes

Attachments: [A - Draft ESB Minutes July 21, 2016](#)

A motion was made by Member Terrill, seconded by Member Chamberlin, that the July 21, 2016 meeting minutes be approved as presented.

The motion passed unanimously.

5. BOARD BUSINESS

[8518-16](#) Approve "Environmental Sustainability" Definition

Attachments: [B - Draft Environmental Sustainability Definition](#)

Richard Dunn, 107 Sierra Vista, commented on the definition of Environmental Sustainability.

Susan Barns, 3406 Ridgeway, commented on the definition of Environmental Sustainability.

A motion was made by Member Chamberlin, seconded by Member Katzman, to amend the environmental sustainability definition to read:

Sustainability is the ability to continue a defined behavior indefinitely. It is a broad concept that incorporates social considerations, economics and the environment that will enable the community to thrive well into the future. Environmental sustainability is a state that allows for indefinite support of our community, its built and natural environment, its quality of life, and future ecosystem health. In order to achieve environmental sustainability, it requires a balance between the rates of resource depletion and generation, while minimizing the rate of pollution.

The motion passed unanimously.

A motion was made by Member Terrill, seconded by Member Chamberlin, that the Environmental Sustainability Definition be approved as amended.

The motion passed unanimously.

[8520-16](#)

Discuss "Pay As You Throw" Option

The Board briefly discussed the Pay As You Throw option.

Richard Dunn, 107 Sierra Vista, commented on Pay As You Throw option.

Don Machen, 1110 1st Street, commented on Pay As You Throw option.

6. COMMITTEE/SUBCOMMITTEE REPORTS

A. Los Alamos Public School Subcommittee - Vacant

Martha Leal, staff member, updated the board regarding an e-mail sent on July 22, 2016 to all Los Alamos Public Schools principals about a recycling and zero waste presentation to be given to students.

The Board will discuss the Los Alamos Public Schools Subcommittee at the September 15, 2016 meeting when new ESB members are present.

7. Chair's Report - John Bliss

No report

8. Liaison Reports

A. Board of Public Utilities - Sarah Terrill

No report

B. Planning and Zoning Commission - James Robinson

Not present

C. Transportation Board - Rebecca Chamberlin

Don Machen, Transportation Board Liaison, reported that the Transportation Board discussed the Urban bike path and the issue of "complete streets". Trinity construction will start in 2017.

D. Parks and Recreation Board - Vacant

E. County Council Liaison - James Chrobocinski

Not present.

9. STAFF REPORT

8519-16 July 2016 Residential Sustainability Report

Attachments: [Residential Sustainability Report - July 2016](#)

Angelica Gurule, Staff Liaison, presented the Residential Sustainability Report to the ESB.

8521-16 ESB Member Recruitment Update

Angelica Gurule, Staff Liaison, reported that three candidates have been interviewed and the recommendations will be presented to County Council on September 6, 2016.

10. PREVIEW OF UPCOMING AGENDA ITEMS

Presentation of Brush and Bulk Item Collection Program discussion.
Environmental Sustainability Plan update.
Energy sustainability and carbon neutrality presentation from Richard Dunn.

11. ADJOURNMENT

A motion was made by Member Chamberlin, seconded by Member Katzman, that the meeting be adjourned.

The meeting adjourned at 6:35 PM.

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County of Los Alamos

1000 Central Avenue
Los Alamos, NM 87544

Minutes

Environmental Sustainability Board

*John Bliss, Chair; Sarah M. Terrill, Sandra West, Rebecca Chamberlin, James Robinson, and
Cliff Shunsheng Han, Danny Katzman, Members*

Tuesday, August 30, 2016

5:30 PM

3701 East Jemez Road, Eco Station
Break Room

Special Meeting

1. CALL TO ORDER - ROLL CALL

John Bliss, ESB Chair, called the meeting to order at 5:30 pm

The following members were in attendance:

Present: Member Bliss, Member Terrill and Member Robinson.

Absent: Member Chamberlin and Member Katzman

2. BOARD BUSINESS

[8543-16](#)

Develop Presentation for the Brush and Bulk Item Collection
Recommendation to be presented to County Council

Attachments: [A - Final Recommendation for Brush and Bulk Items](#)

The board discussed details of how to present the recommendation for the brush and bulk collection program.

3. ADJOURNMENT

The meeting adjourned at 7:00 pm

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County of Los Alamos

Staff Report

September 15, 2016

Los Alamos, NM 87544
www.losalamosnm.us

Agenda No.: A.

Index (Council Goals):

Presenters: John Bliss

Legislative File: 8600-16

Title

Energy Sustainability and Carbon Neutrality of Los Alamos County Buildings - Presentation
by Richard Dunn

...Suggested Motion

N/A

Body

Energy Sustainability and Carbon Neutrality of Los Alamos County Buildings

Attachments

N/A



County of Los Alamos

Staff Report

September 15, 2016

Los Alamos, NM 87544
www.losalamosnm.us

Agenda No.: B.

Index (Council Goals):

Presenters: John Bliss

Legislative File: 8599-16

Title

Update Regarding Special Meeting held on August 30, 2016 to Develop Presentation for the Brush and Bulk Item Collection Program Recommendation

.Recommended Action Motion

N/A

Body

Update Regarding Special Meeting held on August 30, 2016 to Develop Presentation for the Brush and Bulk Item Collection Program Recommendation

Attachments

N/A



County of Los Alamos

Staff Report

September 15, 2016

Los Alamos, NM 87544
www.losalamosnm.us

Agenda No.: C.

Index (Council Goals):

Presenters: John Bliss

Legislative File: 8601-16

Title

Environmental Sustainability Plan Status Update

.Recommended Action

N/A

Board, Commission or Committee Recommendation

N/A

Body

Environmental Sustainability Plan Status Update

Attachments

N/A



LOS ALAMOS

Los Alamos County Environmental Sustainability Plan

Updated August 9, 2016

Introduction

Appreciation and respect of the natural environment of northern New Mexico has long been a cultural value shared by the residents of Los Alamos County. In 2005, the Los Alamos County Council recognized the public's desire to preserve this environmental amenity through the adoption of "maintain environmental quality" as one of its six core goals.

The County created the Environmental Sustainability Initiative (ESI) in March 2008. This initiative narrowed the County's focus from the broad concept of sustainability to eight focus areas:

- 1) Environmental sustainability policy
- 2) Waste and recycling
- 3) Hydrocarbon independence
- 4) Water
- 5) Land use
- 6) Economic development
- 7) Education and outreach
- 8) Measurement and reporting

Within these eight focus areas, short and long term programs and activities were proposed to enable Los Alamos County to become a more sustainable community. Since then, the County has made significant progress on a variety of short and long term activities identified in the ESI. Policies were passed to ensure sustainability is at the forefront of decisions made now and into the future, and significant infrastructure improvements have occurred, including the formation of the Environmental Sustainability Board. The County has taken actions to educate all of its employees on the importance of sustainability in internal operations with the formation of the County Green Team and County Fleet Team. These teams help ensure that the County government is leading the way in transitioning Los Alamos into a more sustainable community.

In addition, the County Council reinforced the importance of the environment in the 2011 Los Alamos County Strategic Leadership Plan by updating one of the goals to read: "enhance environmental quality and sustainability." Later, at the County Council Workshop on November 16, 2013, County Council asked the Environmental Sustainability Board to consider the definition of environmental sustainability to include the "balance of costs and benefits" in response to the desire to include an evaluation component to the goal. The Environmental Sustainability Board accepted the recommendation. Currently, the 2015 Los Alamos County Strategic Leadership Plan defines the County Council's goal for environmental stewardship as "Enhance environmental quality and sustainability balancing costs and benefits."

*"Enhance environmental
quality and sustainability
balancing costs and
benefits."*

2015 Los Alamos County Strategic Leadership Plan Goal

With environmental sustainability included in the County Council's Leadership Plan, what remains is the roadmap. In many ways, the County took progressive steps toward the goal, and a cohesive, expanded vision and strategy as laid out in this document, is proposed as the next step.

Definitions

Before laying a framework to work toward the County's environmental stewardship goals, key terms need to be defined as they pertain to the needs of the Los Alamos community. This Environmental Sustainability Plan proposes the following definitions:

Environmental Stewardship refers to management of the environment, with the intent to provide protection or care;

Environmental Sustainability is the ability to continue a defined behavior indefinitely. It is a broad concept that incorporates a variety of criteria including economics and the environment that will enable the community to thrive well into the future. Environmental sustainability is a state that allows for indefinite support of the community, its built and natural environment, its quality of life, and future ecosystem health. In order to achieve environmental sustainability, it requires a balance between the rates of resource depletion and generation, while minimizing the rate of pollution.

Environmental Quality refers to the current state of the natural environment.

The Environmental Sustainability Board used prior plans and County Council's direction to interpret the County's goal, "enhance environmental quality and sustainability balancing costs and benefits," and developed the following vision: "Los Alamos County's approach to Environmental Sustainability is to engage in environmental stewardship to enhance environmental quality by balancing costs and benefits to make decisions that will enable the community to thrive today and well into the future." This vision calls on our county to take action, as environmental stewards, by working toward a set of key measurable goals, developed to enhance environmental quality and the quality of our community.

Purpose

The Los Alamos County Environmental Sustainability Plan establishes a roadmap for accomplishing the Council's goal to "enhance environmental quality and sustainability." This plan outlines a set of quantifiable goals, referred to as sustainability indicators, chosen after balancing the costs and benefits. In addition, the plan outlines a strategy for tracking progress for each of the sustainability indicators and thus measuring Los Alamos' progress toward reaching the Council's goal. The Environmental Sustainability Plan will be updated every two years in order to track progress, evaluate strategies, and when needed modify or develop new strategies based on data and experience, which is important for attaining the sustainability goals outlined in this document.

Scope

All indicators and goals in this plan apply to the community of Los Alamos County; however, Los Alamos National Laboratory (LANL) energy and water usage is not included in the data reported. The decision to exclude LANL energy and water usage from this plan was based on several reasons:

1. Being a Department of Energy Facility, LANL must follow federal mandates that would supersede any local goal developed in this plan.
2. LANL has their own environmental sustainability plan called "Long-Term Strategy for Environmental Stewardship and Sustainability."

On the other hand, LANL waste generation and diversion numbers are included, since LANL is a major commercial customer for Los Alamos County. Almost all waste generated at LANL, excluding radioactive and other special waste, is disposed at the Los Alamos County Eco Station. The County is also responsible for the collection of solid waste and

recycling from a few LANL facilities located throughout the community. Given the amount of integration in terms of waste and recycling services, LANL is included in Los Alamos County commercial customer data.

Relation to Energy and Water Conservation Plan by Department of Public Utilities

The Los Alamos County Environmental Sustainability Plan is a separate plan from the Los Alamos County Department of Public Utilities Energy and Water Conservation Plan (DPU Plan). The information presented in the DPU Plan is specific to the utility systems operated by the Department of Public Utilities: water, natural gas and electricity. The DPU Plan is a requirement of operating the utility system and it identifies goals for water, natural gas and electricity usage. The goals and baselines used in the DPU Plan are also used in the County's Environmental Sustainability Plan to demonstrate how the County is reducing energy and water usage. The Environmental Sustainability Plan looks beyond the areas of energy and water usage by establishing goals in other areas crucial to creating a more environmentally sustainable community. For a visual representation of how these plans relate see Figure 1.

DRAFT

Los Alamos County Strategic Leadership Plan

The Strategic Leadership Plan is a flexible roadmap that helps guide the County organization and community into the future.

Council Strategic Focus Area: Environmental Stewardship

One of ten focus areas found within the Strategic Leadership Plan with the accompanying goal to enhance environmental quality and sustainability.

Environmental Sustainability Plan

Los Alamos County plan to promote environmental stewardship and enhance environmental quality which will result in a more sustainable community, economy, and environment.

Energy and Water Conservation Plan

Department of Public Utilities plan that focuses specifically on enhancing environmental quality and sustainability through the utility services provided: water, electricity and natural gas.

Western Area
Power Association
Requirement

Office of State
Engineer
Requirement

Figure 1: Flow chart showing the relationship of the Environmental Sustainability Plan to Council's Strategic Leadership Plan and the Energy and Water Conservation Plan.

Sustainability Indicators

The Los Alamos County Sustainability plan includes two distinct categories of sustainability indicators: Community Indicators and Local Government Indicators. These indicators will serve as the County's measuring stick, enabling the County to quantify progress in reaching its sustainability goals. The sustainability indicators incorporated into the Los Alamos County Environmental Sustainability plan are identified in **Table 1** below.

Sustainability Indicators

Community Indicators

1. Community Greenhouse Gas Emissions
2. Public Transit Ridership
3. Municipal Solid Waste (MSW) Recycling Rate
4. Construction & Demolition (C&D) Waste Diversion
5. Effectiveness of Environmental Sustainability Program

Local Government Indicators

1. LEED Certified County Facilities
2. County Operations Greenhouse Gas Emissions
3. Energy Usage of County Facilities
4. Water Usage in County

Table 1: Sustainability indicators for Los Alamos County Community and Local Government.

Although the sustainability indicators do not cover all aspects of sustainability, they do represent the major focus areas adopted by Los Alamos County Council in the Environmental Sustainability Initiative. This plan represents these focus areas with the least number of indicators possible to enable easier and more effective understanding of County goals, and increase the ease of public education. The following is an analysis of each sustainability indicator via three sections:

- (1) The **goal section** presents the goal that the County is striving to obtain. Goals were selected based upon research on actions being taken by federal, state, and local entities across the country, and input from knowledgeable individuals within the County.
- (2) The **performance section** provides quantitative and qualitative information on how the community is performing in each indicator. Community wide indicators have a baseline year of 2006, based on data availability. The local government indicators have a baseline year of 2010. The local government indicators have a different baseline as a result of the major changes that have occurred since 2006 in the County.
- (3) The **strategy section** provides a brief description of proposed actions that will enable the community to reach the established goal for each indicator.

Sustainability Indicator	Goal	Metric	Performance (2012)	Performance (2016)
Community Indicators				
1. Community greenhouse gas emissions	Decrease greenhouse gas emissions based on 2006 – 2012 average.	Metric tons of CO2e from energy and waste	159,431 metric tons CO2e (baseline; average of 2006-2012 emissions)	
2. Public transit ridership	Increase annual transit total passenger trips per hour of operation to 25 by 2020.	Total passenger trips per hour of operation	20.59 total passenger trips per hour	
3. MSW recycling rate	Meet or surpass EPA MSW recycling rate of 40% by 2020.	% of total waste recycled	22% of waste recycled	
4. C&D waste diversion	Achieve 75% diversion of construction and demolition (C&D) materials and debris (waste) by 2020.	% of total C&D waste diverted	64% of C&D waste diverted	
5. Effectiveness of environmental sustainability program	Receive an excellent or good rating from at least 75% of respondents in 2020 survey.	% of residents rating program as good or excellent in Los Alamos County Customer Survey	73% respondents ranked as excellent or good	
Sustainability Indicator	Goal	Metric	Performance (2012)	Performance (2016)
Local Government Indicators				
1. LEED certified County facilities	100% of total County facilities over 5,000 sq. feet shall meet or exceed LEED Silver certification.	% of total County facilities over 5,000 sq. feet that are LEED Silver (or higher) certified	40% of total County facilities over 5,000 sq. feet meets at least LEED Silver certification	
2. County operations greenhouse gas emissions	Reduce greenhouse gas emissions from County operations by 22% or by 2,662 metric tons below the 2012 levels by 2020.	Metric tons of CO2e from energy and vehicle fuel usage	12,100 metric tons of CO2e	
3. Energy usage of County facilities	Reduce the energy usage of County facilities by 15% per square foot or 8787 million BTU's below 2012 levels by 2020.	Million BTU's of energy, includes electricity and natural gas usage	58,583 million BTU's	
4. Water usage in County	Reduce potable water usage in Los Alamos County by 20% or 8,467 thousands of gallons below 2012 levels by 2020.	Thousands of gallons of water used by County	42,337 thousands of gallons of water	

Table 2: List of sustainability indicators with corresponding goals, metrics and performance

Community Indicators

Community Indicator 1: Community Greenhouse Gas Emissions

Goal: Decrease community greenhouse gas emissions based on 2006 – 2012 average.

Performance: This measure includes greenhouse gas emissions from electricity usage, natural gas usage and solid waste generation. **Figure 2** shows total energy usage, including electricity and natural gas, for Los Alamos County by customer class for 2006 to 2012. The emissions that resulted from energy usage for the same time period can be found in **Figure 3**. Greenhouse gas emissions from natural gas usage were determined by utilizing World Resource Institute (2008), GHG Protocol tool for stationary combustion, Version 4.0.

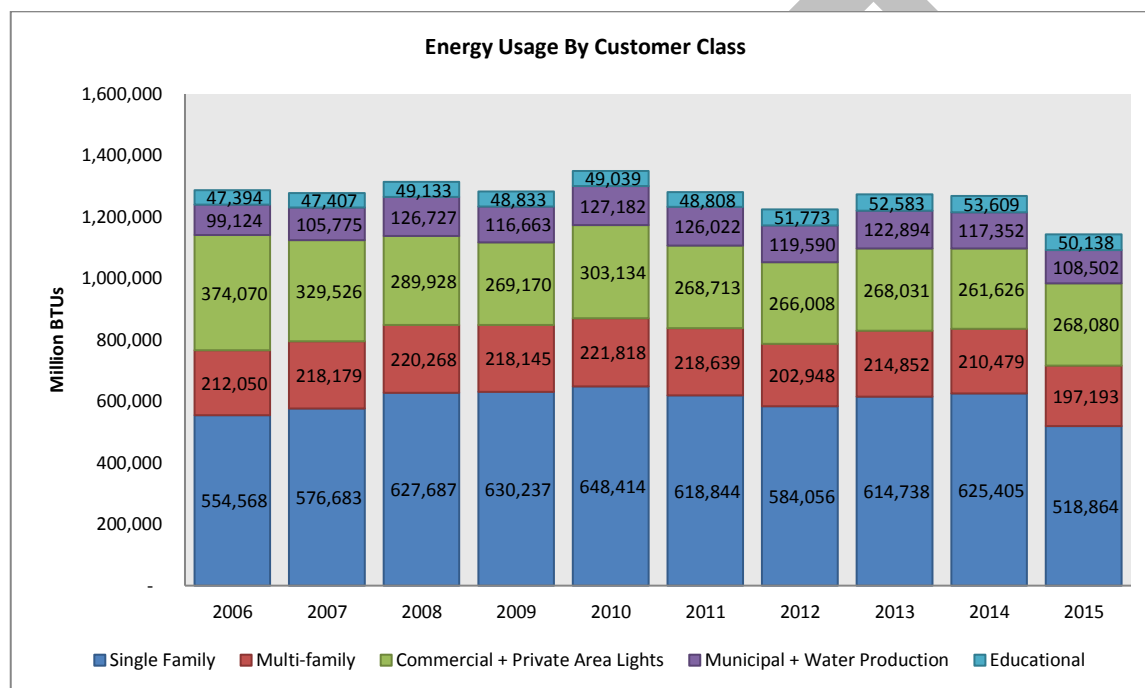


Figure 2: Los Alamos County energy usage which includes natural gas and electricity usage for 2006 – 2015.

Greenhouse gas emissions from solid waste include the emissions from the disposal of municipal solid waste generated by the community and LANL; this does not include the disposal of any secured waste from LANL. When waste is deposited in the landfill it breaks down over a 20-plus year timeframe and emits greenhouse gases, specifically methane.

When determining emissions generated from solid waste stored in landfills there are two commonly used methodologies: (1) ongoing emissions estimation and (2) cumulative emissions estimation.

- 1) The ongoing emissions estimations use a first-order decay model to estimate the actual greenhouse gas emissions on an annual basis.
- 2) The cumulative emissions estimation sums the lifetime emissions of waste and assigns it to the year of disposal; therefore, creating one number that summarizes the environmental impact of waste disposal.

This plan utilizes the cumulative emissions estimation methodology. Emissions from solid waste were found using the methodology presented in Chapter SW.4 Community-Generated Waste Sent to Landfills of the ICLEI Community Protocol. The ICLEI is a global network of local governments dedicated to sustainability, resilience, and climate action. Waste from Los Alamos County is currently shipped to landfills in Rio Rancho, NM.

Figure 3 summarizes Los Alamos County greenhouse gas emissions from electricity usage, natural gas usage and the disposal of solid waste. The seven year average usage is 159,431 metric tons of carbon dioxide equivalents. The County, in conjunction with LANL, has recently undertaken two major renewable energy projects that enable the County to receive electricity without creating harmful greenhouse gas emissions. The first project was the installation of a low-flow turbine at the Abiquiu hydroelectric facility. This turbine generates an additional 6,468 MWH of electricity from a renewable energy source on an annual basis. The other renewable energy project was the installation of a 2 MW solar array on the closed Los Alamos County landfill through a partnership with the Japanese agency NEDO.

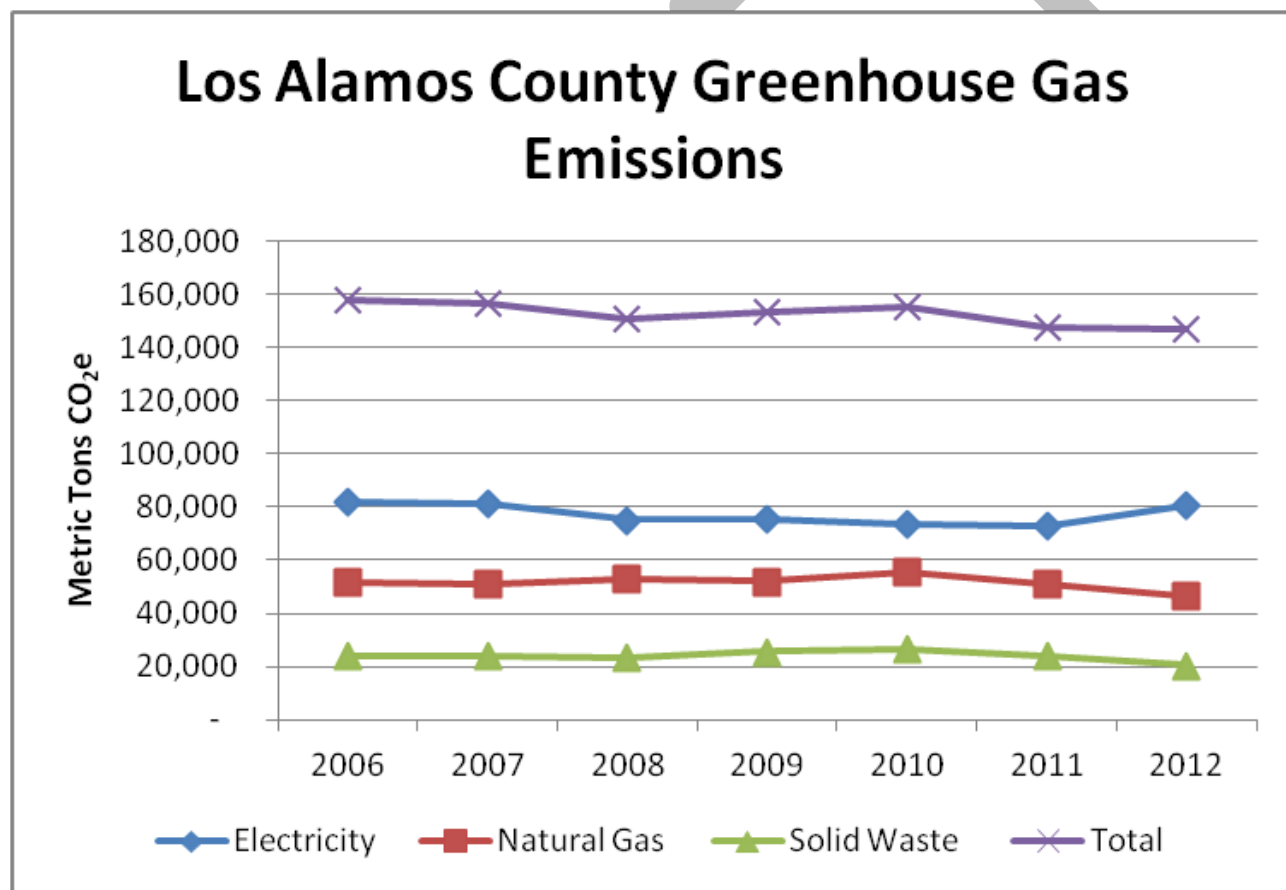


Figure 3: Los Alamos greenhouse gas emissions in metric tons of Carbon Dioxide equivalents for 2006 – 2012.

Strategy: The strategy for decreasing emissions is inherently tied with reducing solid waste creation along with electricity and natural gas usage. Therefore, the strategies discussed previously for these categories apply here. An additional approach is to continue to shift the power supply from hydrocarbon electricity sources toward renewable energy sources.

Community Indicator 2: Public Transit Ridership

Goal: Increase annual transit total trips per hour to 25 by 2020.

Performance: Total trips per hour is an industry standard used to measure the efficiency and impact of public transit systems. It is determined by dividing the annual ridership by the hours the buses are on route. Atomic City Transit began service in October 2007 and has seen a steady increase in its use. Ridership has increased 120% from approximately 255,000 riders in 2007-2008 (the first full year of operation) to over 562,000 in 2011-2012. Services have also expanded with the addition of AM/PM peak service in 2008, the addition of Route 2 to serve the Eastern Area neighborhoods and Pajarito Cliffs Site in 2010, and seasonal shuttle service to Bandelier National Monument. Since the first full year of operation, the number of passenger trips per hour of operation has been approximately 20 (Figure 4).

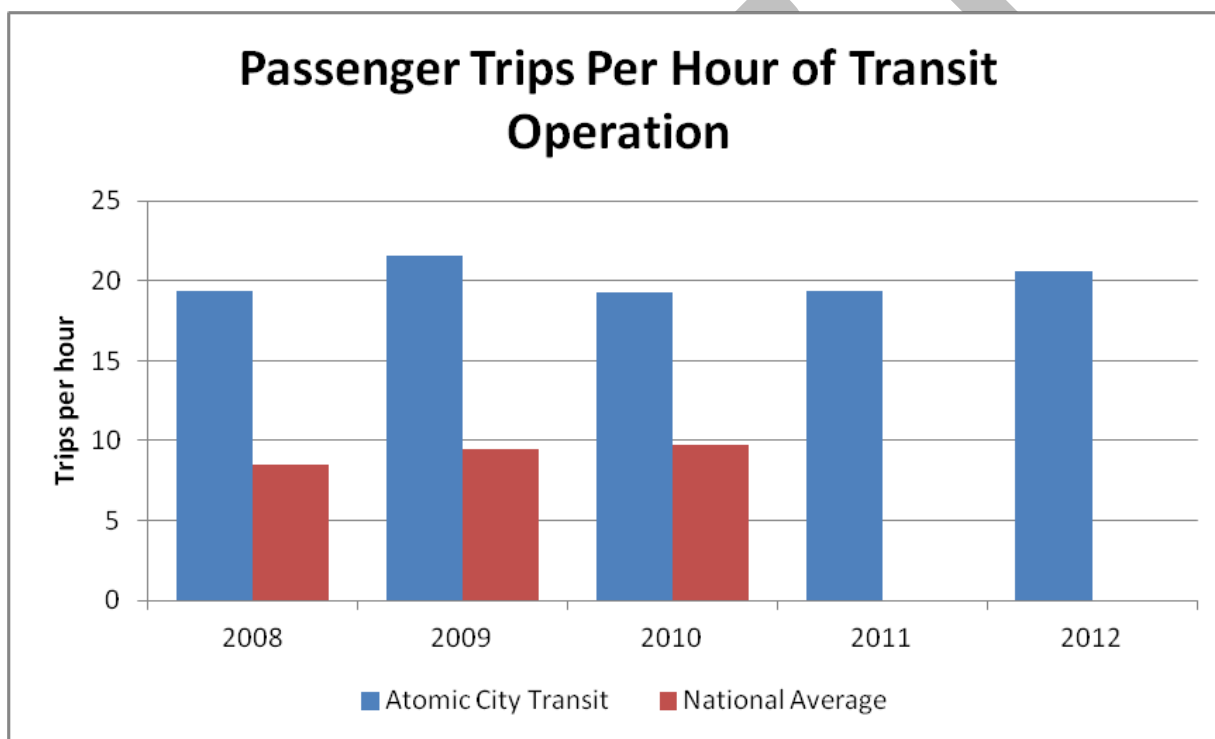


Figure 4: Atomic City Transit trips per hour compared to the national average. Atomic City Transit ridership includes fixed-route and dial-a-ride services. National average comes from the 2012 Transit Fact Book, Small Urban & Rural Transit Center, 2011 and 2012 data not available.

Strategy: In 2014 the County added services that have reduced the amount of personal vehicle miles travelled. The County also partnered with the National Park Service to provide ongoing shuttle service to Bandelier National Monument, which is provided annually from Memorial Day weekend through the end of October. The County is also focused on increasing rider amenities. New bus shelters have been installed throughout the community, with more planned in the future. Automated vehicle location and analytic software was implemented beginning in 2014 to assist transit users in connecting with transit services, as well as transit management in measuring performance and making adjustments to the service where needed – all of which will help increase the passenger trips per hour sustainability indicator. Technology advancements that had been implemented or are coming online in late 2015 include ACTracker on the Atomic City Transit website, which provides real time transit data, including the locations of buses on their

routes and a Trip Planner that enables individuals to plan their own trips using a variety of modes; digital message displays at major transit stops; MyStop mobile app on both Apple and Android devices; QR Code on bus stop signs, which leads users to the website; and, for those who do not have a smart phone, SMS texting capability at bus stop signs to obtain next-bus information at individual stops. The performance indicator from July 1, 2014, through June 30, 2015, is 18.09 passenger trips per hour. Although this is a decrease since 2012 reaching double-digits in passenger trips per hour is considered to be a successful ridership program in the transit industry. The other important factors that can be correlated to this decrease in ridership are lower fuel prices and thus an increase in use of personal vehicles. A comprehensive transit study and five-year plan was completed by an outside contractor and approved by the County Council early in 2015. The plan made recommendations for route and schedule adjustments, as well as vehicle requirements for the service, which will lead to improved performance upon implementation of the plan in early 2016.

Community Indicator 3: MSW Recycling Rate

Goal: Meet or surpass EPA Recycling Rate of 40% by 2020.

Performance: The Los Alamos County Eco Station handles all waste and recycling functions for the community of Los Alamos and captures the majority of routine and non-routine solid waste and recycling from Los Alamos National Laboratory. In 2012 Los Alamos County recycled 17% of all municipal solid waste received. Since 2012 the County has taken action to increase recycling and waste diversion. In 2014 the County expanded the mixed recycle program to include plastics #1 through plastic #7, instead of only plastics #1 and #2. In 2014, the recycle rate was reported to NMED as 21%. In 2016 the recycle rate increased to 23%, a 2% increase over 2014. The expansion of the mixed recycle program is expected to have a significant impact as now there are more opportunities to recycle plastic products. The County recycle rate is still significantly below the national average recycling rate of 33%.

To determine the recycle rate, the following categories of recycle material are included: residential curbside recycling, commercial recycling, Los Alamos National Laboratory recycling, recycling at the Sullivan Field and Overlook Park convenience centers and recycle received at the Eco Station. The scope of materials included in the standard Municipal Solid Waste (MSW) recycle rate include: routine solid waste, food scraps, glass containers, lead-acid batteries, aluminum/tin/steel cans, other ferrous metals, consumer electronics, household hazardous waste, light bulbs, brush and wood pallets, tires, paper products, plastics #1 through #7, and oil. This measurement does not include Waste Water Treatment Plant (WWTP) sludge, asphalt, concrete, clean dirt, or construction and demolition debris.

Strategy: In order to effectively increase the recycling rate in Los Alamos County it is important to have an understanding of the waste stream. A waste audit should be implemented to better understand the composition of the waste stream and to identify the materials that make up a large percentage of the waste stream that can help direct effective recycling strategies. **Figure 5** is a breakdown of the U.S. waste stream for 2010. More than half of the waste typically generated falls into the categories of paper, food scraps, and yard trimmings; making these materials important areas to focus recycling efforts. Other strategies is to explore incentive based programs such as RecycleBank as well as continue educating the public regarding recycling and reuse.



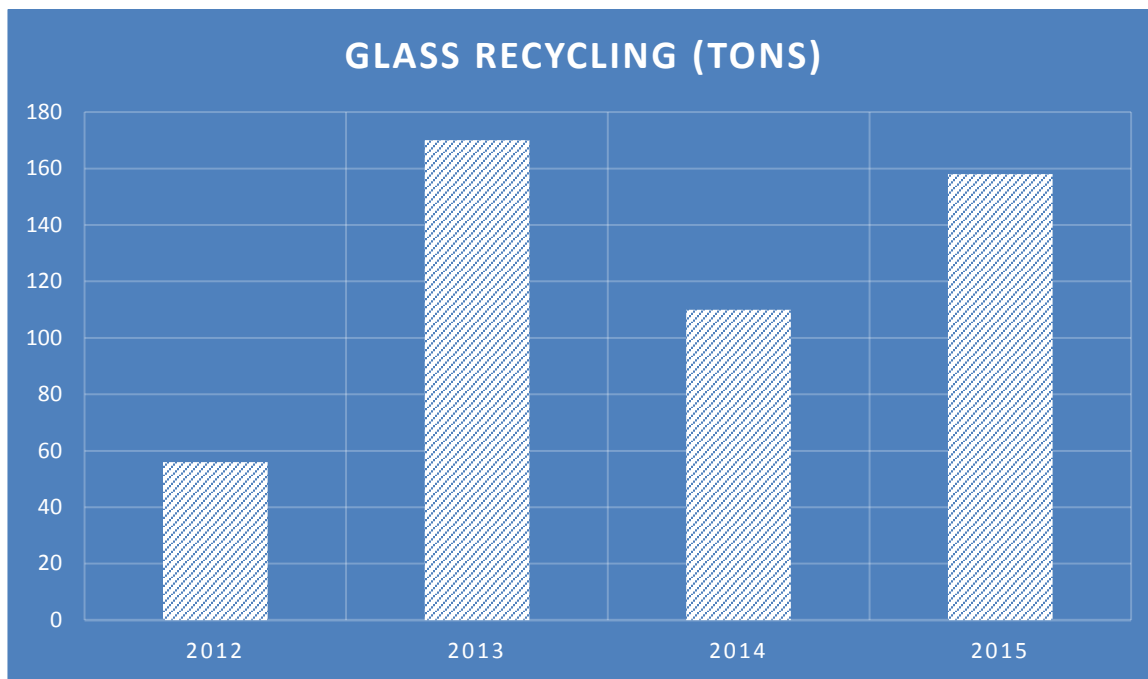
Figure 5: Total U.S. MSW generation by material, 2010.
Data from U.S. EPA 2010 Waste Characterization Study.

The reestablishment of a composting program in Los Alamos County has recently enabled the County to better capture green waste (brush, yard trimmings). In 2013 the County implemented a fully functioning windrow composting facility in Bayo Canyon at the site of the old wastewater treatment plant.

The windrow composting facility has the potential to provide opportunities to expand beyond the green waste composting program and accept food waste which will keep more materials out of the landfill and decrease greenhouse gas emissions. The County will investigate the addition of food waste to the composting stream to ensure food waste can be added without negatively affecting the quality of the finished compost product and/or cause operational problems. A feasibility study is to be conducted and finalized in 2017. A food waste composting program could also accept soiled paper, which is not currently being recycled.

The County also worked to increase local business participation in the recycling program. An analysis was performed, identifying a handful of businesses that were estimated to generate a decent amount of recyclables who were not recycling due to cost. In response, the County decreased the commercial recycling rates to incentivize more commercial recycling. Outreach and education to businesses informing them about these adjusted rates and the benefits of recycling will continue.

The new County glass drop-off recycling that started in late September 2012 has certainly helped increase the recycling rate in Los Alamos County. Initially, the new glass recycle program was anticipated to divert 100 plus tons of glass from the waste stream on an annual basis. The glass is crushed and then given away for free for use by residents or non-residents in landscaping and other projects. The County will also use the crushed glass in a variety of different projects. In the first year, the County recycled 54.81 tons of glass, in 2013, there was a dramatic increase to 170.64 tons of glass recycling. In 2014, the County recycled 108.31 tons of glass.



The public was asked to prioritize other possible strategies to reach the goal of a 40% recycling rate by 2020. Input was collected during two public meetings and through an online survey. **Table 3** shows the results.

Rating	Recommended Strategy	Total Score
1	Increase materials accepted in curbside mixed recycling	100
2	County reuse center	96
3	Pay-As-You-Throw (PAYT)	72
4	Curbside organic waste collection	71
5	Mandatory commercial recycling	70
6	Commercial glass recycling pickup	64
7	Landfill ban	19

Table 3: Results of prioritization exercise in which public was asked to rank their three favorite strategies to reach recycling goal.

The County recently pursued the strategies ranked #1 and #2. A new Material Recycling Facility was constructed in Albuquerque that accepts more materials including #3-#7 plastics and paperboard. The County currently expanded the list of materials accepted in curbside mixed recycling including plastics #1-#7, aluminum and tin cans, and mixed paper products. The County also opened a reuse center located at the Eco Station. The reuse center accepts all gently used items and is another opportunity to divert waste from the landfill. Residents can place items for reuse such as tires, old sewing fabric, dishes and furniture. Other residents can collect items from the reuse area free of charge.

Recommendation #3 has been reviewed briefly by the ESB and requires more research and analysis as well as public comment. A PAYT program charges variable rates dependent upon the amount of waste generated by each customer, thereby financially incentivizing waste reduction. PAYT programs have been successfully adopted in cities across the country and around the world and are found to be a very effective means of increasing waste diversion. The cities who have adopted the PAYT strategy have realized a 50% waste reduction. The Environmental Services Division and the Environmental Sustainability Board (ESB) are currently analyzing the option of switching to a PAYT system. The County

and ESB will utilize the results of the prioritization exercise in future program planning and development.

Community Indicator 4: Construction & Demolition Waste Diversion

Goal: Achieve 75% diversion of construction and demolition (C&D) materials and debris by 2020.

Performance: Los Alamos County Eco Station receives the majority of the construction and demolition materials generated throughout the County and within the LANL complex. In 2012, the County diverted 64% of construction and demolition materials from the landfill. The concrete and asphalt were crushed and reused in a variety of construction projects including pavement of roads and streets projects. To calculate the C&D waste diversion rate the following materials are included: C&D debris, asphalt, concrete, shingles, gypsum (drywall), and carpet.

Strategy: The County will evaluate the current marketing approach to target construction contractors to expand the customer base and increase all opportunities to capture C&D materials at the County Eco Station. The County Council approved a rate change that became effective August 1, 2015. The rate change will decrease the deposit required from Contractor's who rent roll-off service from \$1000 to \$650 if the contractor has twelve on time previous payments. This initiative should make the County's commercial roll-off program to become more competitive with neighboring markets. As a result of marketing and financial incentives, the customer base and C&D diversion rate is expected to increase and bring the County closer to achieving a 75% C&D diversion rate.

Community Indicator 5: Effectiveness of Environmental Sustainability Program

Goals: Receive an excellent or good rating from at least 75% of respondents in 2020 survey.

Performance: Performance for this measure is based on responses to the following statement in the community survey conducted every other year: Effectiveness of County environmental sustainability program. 4 shows citizen responses to the statement in the 2010 and 2012 survey.

Do you feel the quality of each item is:	2010		2012	
	Count n = 238	%	Count n = 259	%
Excellent	39	16.4%	31	12.0%
Good	120	50.4%	157	61.0%
Fair	58	24.4%	57	22.0%
Poor	21	8.8%	13	5.0%

Table 4: Responses from 2010 and 2012 community survey question regarding the effectiveness of the environmental sustainability program

Close to half of the respondents were unable to rate the environmental sustainability program due to their unfamiliarity with the program. These results clearly show that much more public outreach and education need to occur on this initiative. However, this table only included the responses of individuals who were familiar with the environmental sustainability program. In 2012, there was an increase in the number of individuals who provided an excellent or good rating.

Strategy: County staff will continue to work collaboratively with community groups to increase awareness and citizen education in terms of sustainability. Over the past several years the County has had great success partnering with

community groups to develop new programs and increase the effectiveness of existing programs. The work of county government teams focused on the topic of sustainability will also assist greatly in increasing awareness internally, and generating more educated employees who can interact with the community. The publication and annual updates to this document and the Department of Public Utility's Energy and Water Conservation Plan will be integral in raising citizen awareness and participation in the community sustainability programs.

Los Alamos County Local Government Indicators

Due to many recent changes to county facilities it was determined that in order to accurately set local government goals 2011 should be used as the baseline year for facilities-related indicators. For non-facility related measures 2006 is utilized as the baseline.

Local Government Indicator 1: LEED Certified County Facilities

Goal: 100 percent of new County facilities over 5,000 sq. feet will meet or exceed LEED Silver certification.

Performance: LEED (Leadership in Energy and Environmental Design), is an internationally recognized green building certification system developed by the US Green Building Council. With the completion of the Judicial Complex and Pajarito Cliffs Site in 2010, approximately 40% of the total square footage of County facilities was at least LEED Silver Certified. The Pajarito Cliffs Site was awarded LEED Gold and the County will continue to strive towards Gold when cost effective. In six years, the County increased the percentage of total building square footage that is LEED certified from 0 to 40%.

Strategy: All new County buildings over 5,000 square feet will meet or exceed the LEED Silver building standards adopted by the County Council. As old buildings are replaced, LEED Silver certified or better facilities will take their place.

Local Government Indicator 2: County Operations Greenhouse Gas Emissions

Goal: Reduce greenhouse gas emissions from County operations by 22% below 2011 levels by 2020.

Performance: This measure includes emissions from fuel usage in County vehicles, and electricity and natural gas use in County operations, **Table 5**. One common measure that was not included is emissions from waste due to the fact that there is no accurate way to ascertain County government waste from total County waste figures.

		Electricity (MWH)	Natural Gas (MMBTU)	Gasoline (Gallons)	Diesel (Gallons)	Total Emissions
2011	Usage	10,084	36,501	163,762	141,594	10,945
	Emissions (Metric Tons)	5,899	2,166	1,443	1,437	
2012	Usage	11,014	37,581	183,378	167,164	12,426
	Emissions (Metric Tons)	6,881	2,233	1,616	1,697	

Table 5: County electricity, natural gas and vehicle usage and the resulting greenhouse gas emissions for 2011.

Through the formation of the Green Team, the County has created a centralized body to work on developing policies and implementing specific sustainability initiatives to reduce energy and fuel usage. The team is comprised of County employees from a wide range of County departments and divisions tasked with creating a more sustainable County government. This team has also spawned a new team focused specifically on greening the County fleet. This internal

team, combined with ideas and support provided by the Environmental Sustainability Board will ensure that the sustainability efforts of the county continue to move forward.

Strategy: While buildings play a significant role in energy usage, they also play a significant role in greenhouse gas emissions. Therefore, when focusing on reducing emissions, the County must utilize the strategies mentioned in the previous section focused on the energy intensity of facilities. Another approach the County is pursuing is the installation of on-site renewable energy systems at County facilities. On-site renewable energy systems generate electricity from a renewable source such as sun or wind, and result in no greenhouse gas emissions. These sources can be used in place of carbon intensive electricity that results in high levels of greenhouse gas emissions. On-site renewables in the form of solar thermal panels to generate hot water are currently being installed at the new Justice Center and Animal Shelter, and are already in use at the Eco Station.

Local Government Indicator 3: Energy Usage of County Facilities

Goal: Reduce the energy usage of County facilities 15% per square foot below 2011 levels by 2020.

Performance: Energy usage is a measure of the total annual amount of purchased energy used in County facilities; this includes natural gas and electricity. In 2012, County facilities utilized a total of 66,515 million BTU's of energy; 46% from electricity and 54% from natural gas. This was a 6% increase from the 62,790 million BTU's of energy used in 2011.

One policy that will continue to greatly assist in minimizing emissions resulting from energy usage is the County Green Building Policy. This policy reduces energy usage by ensuring that all new County facilities are built in a way that maximizes energy efficiency and promotes alternative transportation. The County also performed building assessments and energy audits on all county facilities expected to be in operation into the foreseeable future. These audits identified approximately 50 potential modifications and energy management changes that have a simple payback of less than ten years. Implementing these changes will greatly reduce building energy usage and save the County money.

Strategy: The County must ensure that the Green Building Policy continues to be implemented, thereby ensuring new facilities are energy efficient. In terms of existing facilities, the County needs to enact the energy saving measures identified in the recent energy audits. These energy saving measures may come with a high upfront cost, but all identified measures will pay themselves off within ten years and result in more efficient and greener County infrastructure. The implementation of these energy savings measures in conjunction with the building assessment strategy used by the County will ensure existing facilities are performing efficiently.

Creating energy efficient facilities is only part of the solution since it is the behavior of building occupants that leads to a significant portion of energy usage in County facilities. Therefore, the County will continue to educate its employees in order to reduce inefficient behaviors, such as reminding County employees to turn off their computers at the end of the work day in order to help save electricity and money. The amount of education and information disseminated to County employees will increase, spearheaded by the Green Team. Changing wasteful and inefficient behaviors such as leaving the light or computer on when not in the office, or using a space heater during the cooler months, can have a noticeable impact on energy usage, and can also help develop behaviors in employees that will save them energy and money at home.

Local Government Indicator 4: Water Usage by County

Goal: Reduce potable water usage in Los Alamos County by 20% below 2012 levels by 2020.

Performance: In 2012, 42,337 thousands of gallons of potable water were used for irrigation of County parks and other green space. This was a 16% reduction from 2011. The Parks Division is currently taking proactive measures to help minimize the water needs per acre of grass. Frequently aerating grassy areas and planting grass species best fit for the local environment ensure that a beautiful landscape is created while minimizing water use.

Strategy: Reduce the amount of water used by indoor water fixtures and for irrigation through the installation of timers and evapo-transpiration sensors, and expand the availability of an effluent water supply system that will increase the acreage that can be irrigated with effluent water. Reducing water use will require a thorough facility water audits and irrigation audits in order to identify potential areas to be converted from high water use to low water use without negatively affecting community usage of facilities and/or significantly increasing labor requirements.

Plan Update Process

A report will be published every two years collaboratively by the Environmental Services Division and Environmental Sustainability Board, updating the County's progress towards the established goals. The report will contain updates on the sustainability indicators, provide information on accomplishments and cite any necessary adjustments to strategy as a result of unsatisfactory performance. The Los Alamos County Environmental Sustainability Plan is meant to be a very dynamic document allowing for the addition of new goals or significant changes to current goals. Critical analysis of goals and strategies on a biennial basis by the Environmental Services Division and Environmental Sustainability Board will ensure that issues of environmental sustainability are continually at the forefront of importance in Los Alamos County, guiding the community toward a brighter future.



County of Los Alamos

Staff Report

September 15, 2016

Los Alamos, NM 87544
www.losalamosnm.us

Agenda No.: 1.

Index (Council Goals):

Presenters: Angelica Gurule

Legislative File: 8607-16

Title

Los Alamos Public School Subcommittee Update

Body

Los Alamos Public School Subcommittee Update

1. Recycle Bowl
2. Recycle Fashion Show
3. Zero Waste and Recycle Presentation
4. Increase recycling bins in school



County of Los Alamos

Staff Report

September 15, 2016

Los Alamos, NM 87544
www.losalamosnm.us

Agenda No.: 1.
Index (Council Goals):
Presenters:
Legislative File: 8606-16

Title

August 2016 Residential Sustainability Report

.Recommended Action Motion

N/A

Body

August 2016 Residential Sustainability Report

Attachments

E - Residential Sustainability Report - August 2016



Residential Sustainability Report

Service Period: August 2016

Recyclables Collected: 114.30 tons

Trash Collected: 556.88 tons

Compostable Materials Collected: 112.39 tons

Total Material collected: 783.57 tons



LOS ALAMOS

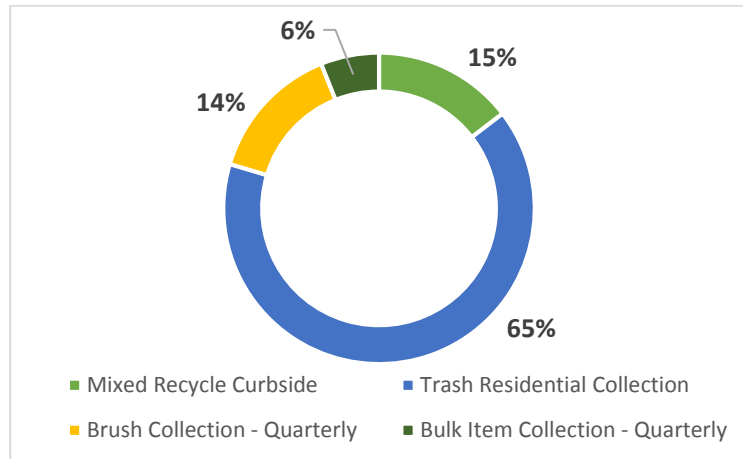
Monthly Collection Report

July Diversion Rate: **25%**

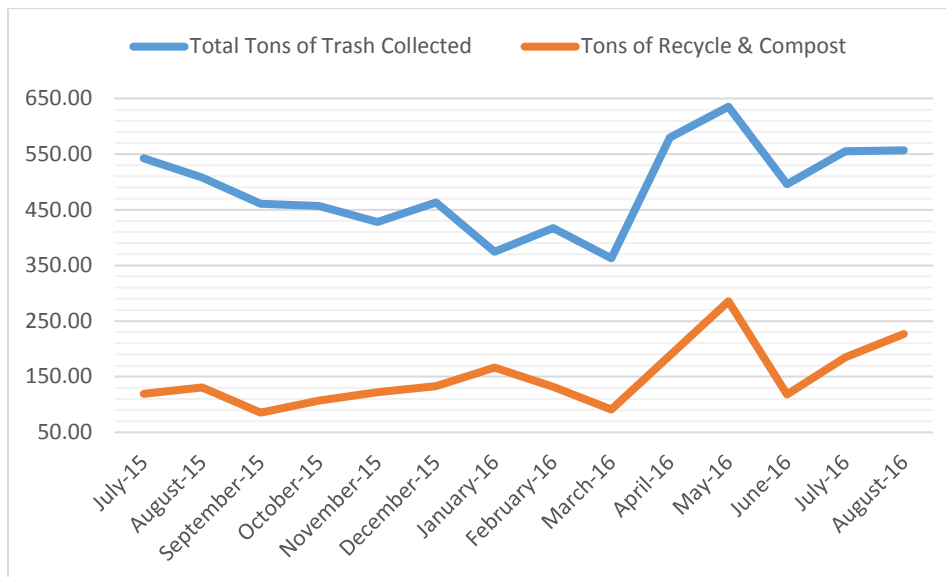
August Diversion Rate: **29%**

A **16%** Increase in Diversion

The *diversion rate* is the percent of materials recycled and composted.



Month by Month Recycling Comparison



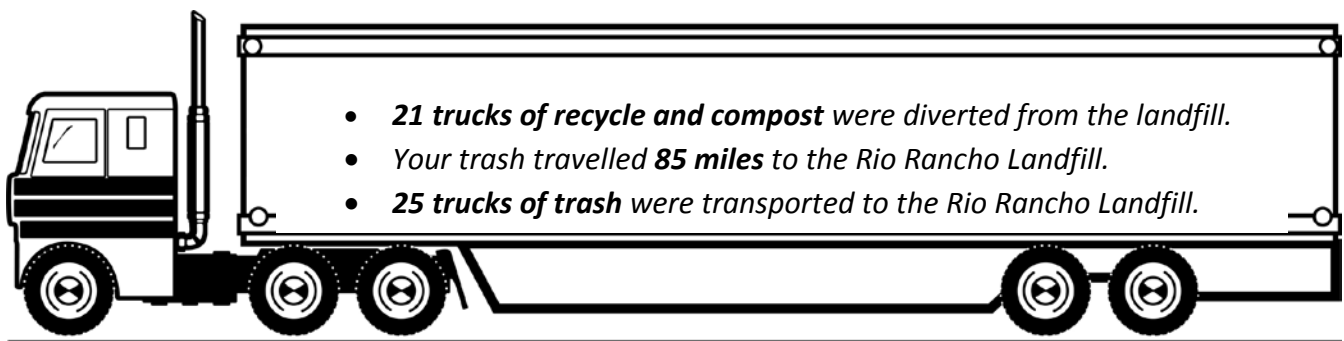
Tips to Recycle More

Recycle all cardboard packages.

Don't forget to recycle empty bathroom products such as shampoo and conditioner bottles, hair spray and hair gel containers, and hand soap bottles.

Take all green yard waste to the Eco Station for composting such as leaves, pine needles, branches and grass clippings.

Recycle Junk Mail and shredded paper.





County of Los Alamos

Staff Report

September 15, 2016

Los Alamos, NM 87544
www.losalamosnm.us

Agenda No.: 2.
Index (Council Goals):
Presenters: Angelica Gurule
Legislative File: 8608-16

Title

Environmental Services Waste Sort

.Recommended Action Motion

N/A

Body

Environmental Services will conduct the second waste audit on September 30, 2016, to better understand the composition of the waste.

Volunteer:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Attachments

N/A



Los Alamos County Solid Waste Audit

Final Report

Presented to:

Los Alamos County Environmental Services
3701 East Jemez Road
Los Alamos, NM 87544

Presented by:

Jessi Just Consulting
2777 Mizpah Park Road
Benton Harbor, MI 49022
269-779-0317

April 30, 2016

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Chart 3 Sorted Waste as a Percentage of Total Annual MSW	7
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APPENDICES

- A. Waste Sort Press Release
- B. Waste Sort Photos
- C. Project Invoice

Project Summary

On March 25, 2016, a compactor truck dropped mixed MSW on the transfer station floor. Los Alamos County Eco Station staff and Jessi Just Consulting conducted a waste sort on that 6,280 lbs (3.14 Tons) of household garbage. The material sorted represented about 100 households on one route in an urban Los Alamos neighborhood. Staff opened trash bags and sorted material into nine different categories, with the remaining material counted as “trash”.

A general summary of the volume and weight of each category is shown in Table 1.1.

Table 1.1 Sorted Material Totals

SORTED MATERIALS	Material Weight (lbs)	Percentage of Total By Weight (lbs)	Material Volume (cu.yds.)	Percentage of Total By Volume (cu.yds.)
Mixed Recycling	400.0	6%	10.0	26%
Cardboard	180.0	3%	1.5	4%
Food Waste	880.0	14%	2.0	5%
Yard Debris	720.0	12%	10.0	26%
Glass	400.0	6%	1.0	3%
Scrap Metal	100.0	2%	0.3	1%
HHW	100.0	2%	0.3	1%
Trash	3200.0	52%	1.0	3%
Electronics	100.0	2%	0.5	1%
Reusables	100.0	2%	12.5	32%
Total Waste	6180.0	100%	39.0	100%

Of the total 6,180 pounds, just 100 pounds was considered HHW. The materials were mostly undried latex paint and stains. Just one potentially dangerous item was found by staff and immediately handled properly. No one was injured and the item looked like a horse or cattle medicine injection needle full of liquid, attached to a medical bag.

In general, it looked like this neighborhood recycled basic household recyclables, because mixed recycling and cardboard were very minimal. As predicted by staff, there was a large amount of yard debris. We also noted that much of the yard debris (as leaves, pine needles, and grasses) went uncounted because it was nearly impossible to separate that small debris from the trash.

All materials were recorded in both volume and weight measurements. Distinguishing the difference between the heavy materials and the bulky materials is very important in goal setting. As you set program goals, you will also want to consider which type of waste is causing more problems, costing more money, or would gain the most benefits from diversion. Diverting heavy materials from the landfill, such as food waste, often save municipalities money in transportation costs and tipping fees. The benefits of diverting bulky materials, such as yard debris and reusables, are saving landfill space and providing a valuable service to residents.

Chart 1 (page 5) shows materials as a percentage of the total weight. The “trash” comprises the largest category by weight. Materials noted in this category were: cat litter, diapers, full cans/package food, grass clippings, and leaf litter – all wet and heavy items. Note, as well, that the original material had been compacted which tends to weigh 2 to 3 times more than the same volume of uncompacted material.

The next heaviest category recorded was food waste. This is common, even at a national level. Recorded in tons, food is the second largest category of waste in the United States. (See Chart 4, page 8). Just one cubic yard of vegetative food waste weighs over 1,000 pounds.

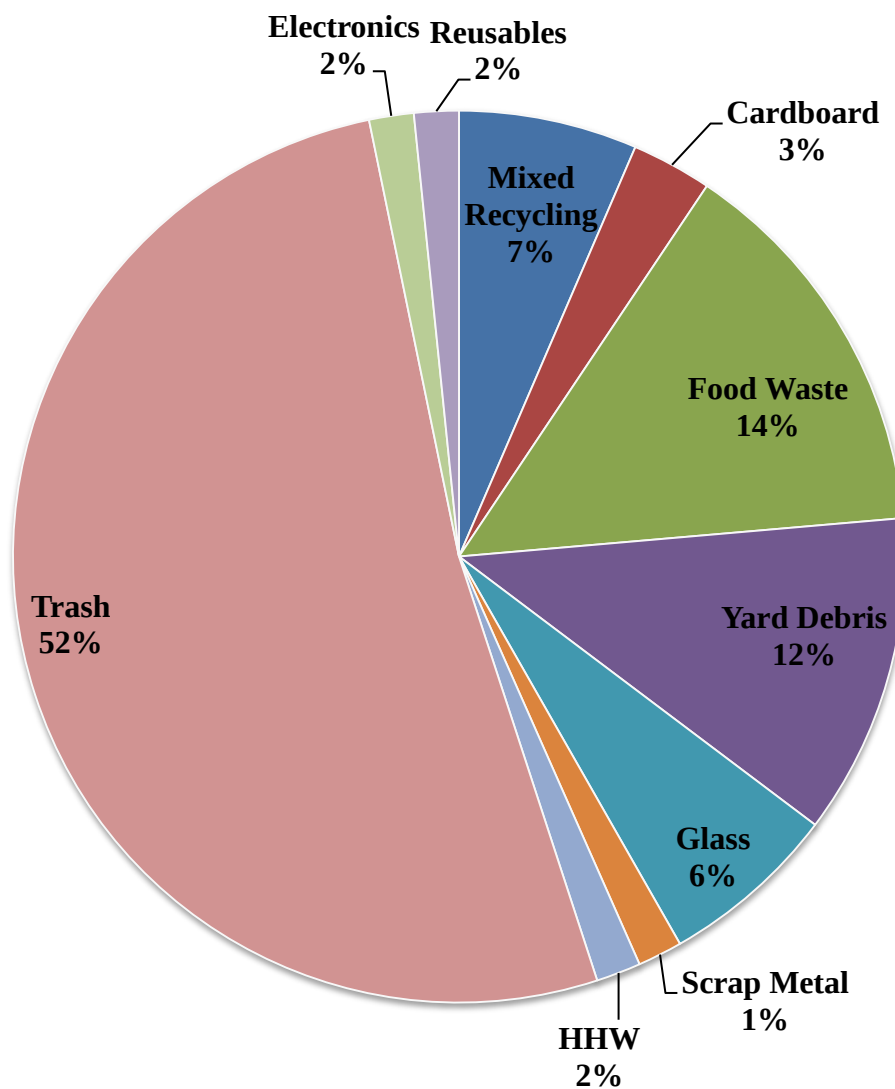
Chart 2 (page 6) shows materials as a percentage of the total volume. You’ll notice that trash has dropped to one of the smallest categories. Mixed recycling and yard debris now make up the largest categories.

Chart 3 illustrates the annual recycling rate, currently at 9%. This percentage was generated by simply dividing the annual tonnage of MSW generated by the annual tonnage of recycling generated (2015).

The pull out section of this graph shows the weight of the sorted material compared to the total weight of MSW generated in Los Alamos County in one year. This is simply a reminder of the small sample size.

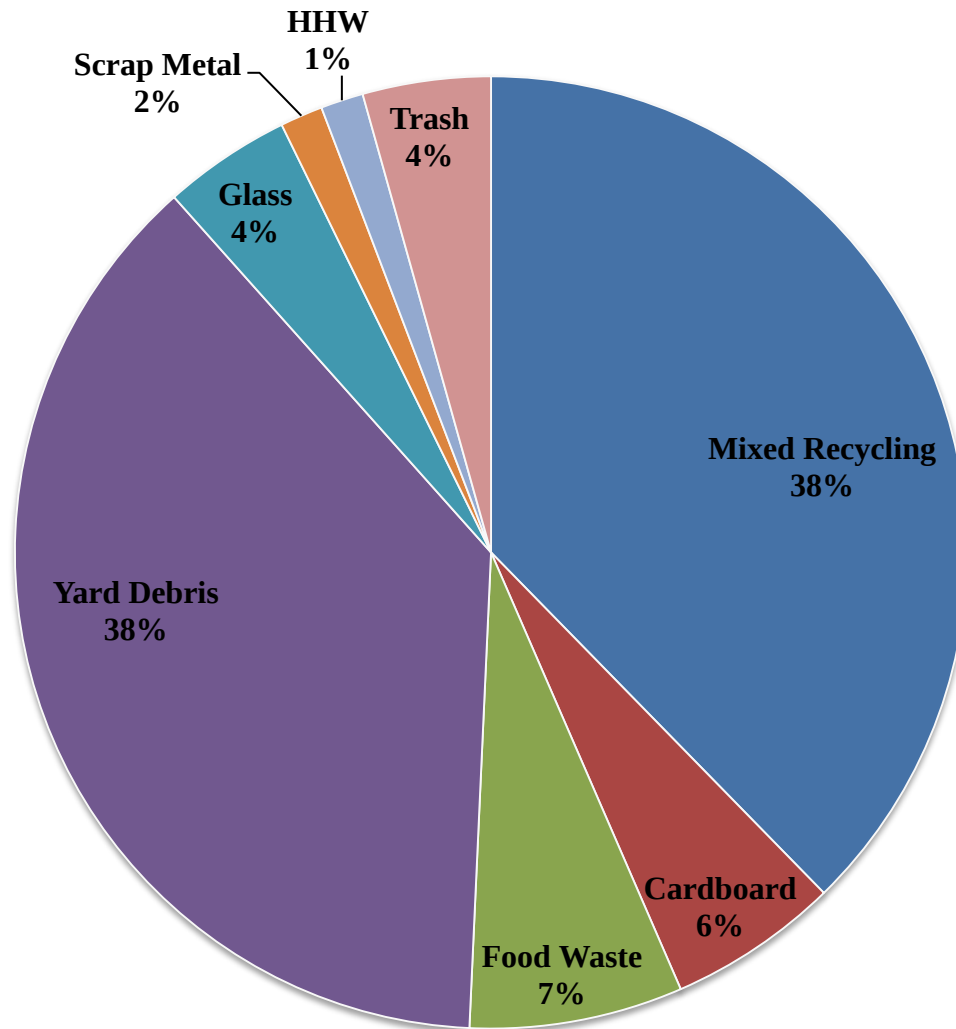
Los Alamos Waste Audit Data Charts: Chart 1

Sorted Categories as Percentage of Total Weight
Total Sorted = 7,860 lbs



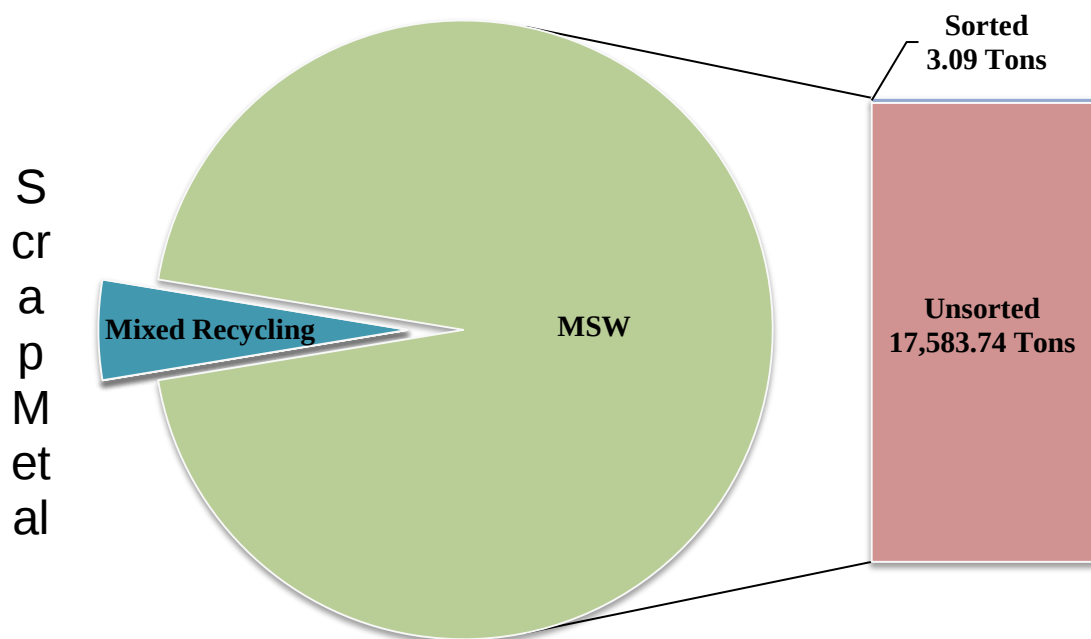
Los Alamos Waste Audit Data Charts: Chart 2

Sorted Categories as Percentage of Total Volume
Total Sorted = 39 cu.yds.



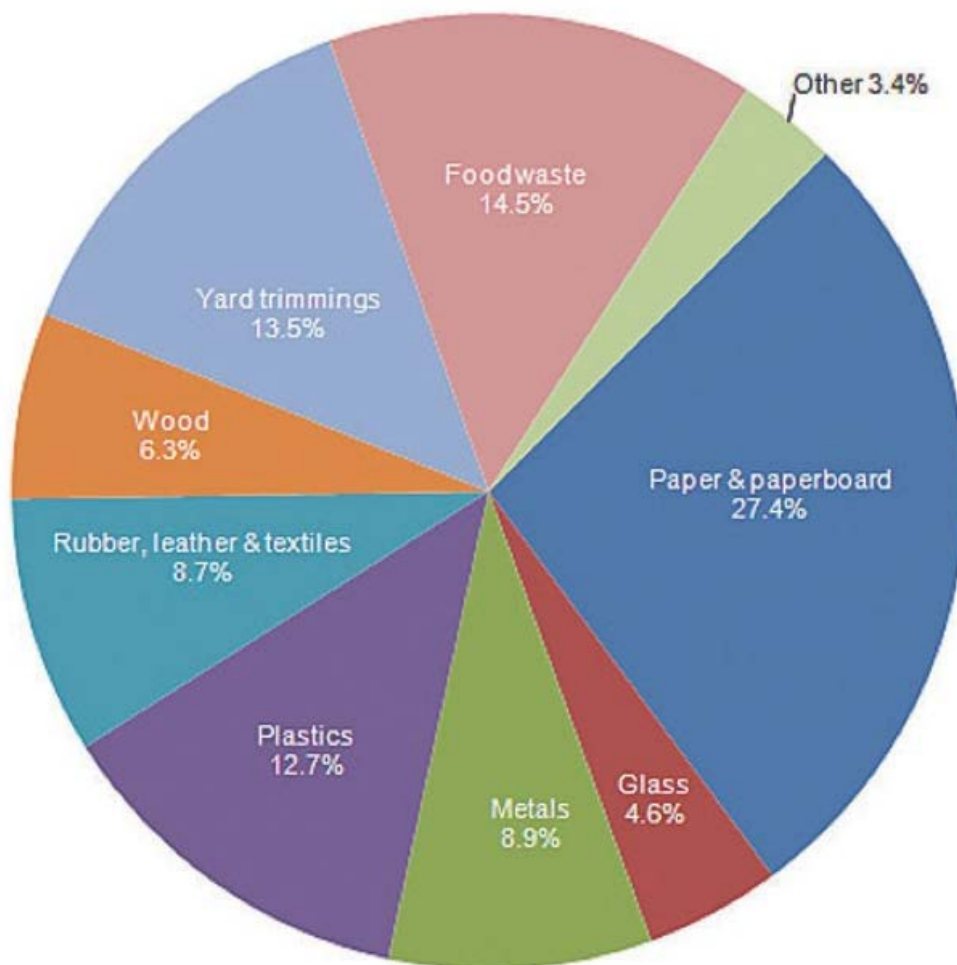
Los Alamos Waste Audit Data Charts: Chart 3

**Sorted Waste as a Percentage of
Total Annual Los Alamos County MSW**



National Waste Data Chart 4

Total MSW Generation (by material), 2012 251 Million Tons (before recycling)



Assumptions

It would not be wise to base any program decisions on so little data from this small waste audit. As we see represented in Chart 3 (page 6), the sorted material is less than 1% of the total amount of MSW through the transfer station annually. With such a small sample size, I cannot recommend program changes or decisions based on the data collected.

I can, however, make some broad assumptions based on information collected during our waste audit and over the course of this project, which may help you to continue growing your recycling program.

Assumption 1: Continue to host waste audits throughout the year, in order to capture more data and a larger sample.

There are a variety of ways to conduct audits, from simple to complex. Choosing different waste streams for an audit, such as one neighborhood or only small businesses, can help to gather focused data. Once the focus group is chosen, visual audits can be conducted on some portion, then a waste sort, and even a survey can all help determine what is in the waste and how much. The combination of a focused audit and a simple goal can help move a recycling program forward in manageable steps.

You may also consider conducting random waste audits on loads much like you already conduct inspections. Once a day, an inspection on just one, 96-gallon cart of trash would be about a 21 Ton sample size, annually. In order for this method to be efficient, the audit should only capture data on 1 or 2 material categories.

Assumption #2: Consider food waste collection in the long-term planning of your yard debris collection program.

There is a long list of benefits to diverting food waste from landfills. Over 150 cities have begun food waste collection programs because it extends the life of landfills, and saves money in tipping fees, but other benefits are showing. Some cities, like San Francisco, and even rural areas in Iowa have found that it is cheaper to compost than dump food waste because it reduces the risk of potential groundwater pollution and the end product of compost can be reused and resold as fertilizer.

Healthy soil for erosion control, fertilizer on fields, and land remediation is a desperate need in New Mexico, so any municipality that can make good soil from a waste product will benefit greatly.

Asking for a little guidance on site and equipment requirements, options, or planning would be a great first step that would help in goal setting. Start with Joan Snider at NMED (505-827-2780) or Walter Dods at Soilutions (505-877-0220).

Assumption #3: Seek ways to increase the Los Alamos County recycling rate.

It is clear from visual audits on the mixed recycling pile at the Eco Station that recyclers in Los Alamos County understand the rules. Good job! Recycling right is a very important part of our industry – quality in, quality out.

It is also clear from the waste sort data that the residents in this neighborhood were recyclers. This was a very small sample size, however. By using the following formula we can calculate the Los Alamos County recycling rate.

<u>TONS RECYCLED</u>			<u>1762.5</u>	
TONS RECYCLED	=	RECYCLING RATE	1762.5	= 11%
+			+	
TONS DISPOSED			17568.83	

In comparison, this is below the New Mexico state recycling rate (currently 16%) and well below the national recycling rate (currently static at 34%).

With such “good” recyclers already on board, this is the perfect time to start seeking new audiences for captivating campaigns, new businesses for the commercial recycling route, and new residents who are hesitating to recycle. Studies have shown that the top 3 ways to increase participation in recycling are: convenience, incentives, and outreach. With audits in focus, this may be a good time to “audit” the outreach program, too. Where is it working? Where could you improve? What new audiences can you reach out to?

April 5, 2016

Los Alamos County Environmental Services conducts waste audit to answer questions about recycling

Los Alamos – A Los Alamos County Environmental Services (LAC) compactor truck, half-way through its morning route, came back to the LAC Eco Station to drop 7,860 pounds of trash. On a typical day, this driver would fill the truck with about 20,000 pounds of trash before returning to the Eco Station, but on March 25th staff and LAC Sustainability Board President, John Bliss, were prepared for the smaller mixed trash load to arrive.

Dressed in protection equipment from head to toe, staff and volunteers began opening trash bags and sorting material from the huge pile into smaller categories. Food waste, yard debris, mixed recycling, glass and cardboard each had a separate bin. Hazardous waste, electronics and scrap metal were also separated from the main pile. The crew worked fast to determine which recyclable category the material would have gone into before it was mixed with other trash. Once a bin was full, it was weighed on the scale and recorded. Any material that did not fit into these categories was recorded as trash.

By the end of the day, just 6 people had sorted, weighed and recorded 6,280 pounds (3.14 Tons) of the mixed trash pile.

“It’s definitely hard work, but we have learned so much about what is still going into the trash,” noted Angelica Gurule, Environmental Services Manager.

LAC is dedicated to sustainability and providing services which create a better community for current and future generations. Recently, LAC hired Jessi Just (Jessi Just Consulting) to help with a “waste sort”. This activity, combing through trash and sorting into categories, is designed to help identify volume and weight of recyclable materials generated. Data from this activity, and future waste sorts, will be used to grow program services and improve outreach efforts.

“From this sort, it was clear that most people recycle the common materials,” explained Jessi Just. “I was really pleased with the lack of cardboard mixed into regular trash! In order to make clear assumptions based on data, LAC will need to conduct several more waste audits, but this is a great start!” Ms. Just reported.

Ms. Just will document all findings in a report to LAC Environmental Services later this month, but she gave us a sneak peak at some of the largest categories of sorted, divertable material.

Yard debris made up one of the largest categories, at 720 pounds of the total sorted.

“Perhaps citizens are not aware that they can bring leaves, dead plant material and small branches to the Eco Station for recycling? This decaying material is a good nitrogen source for LAC’s composting program, so it’s sad to see so much of it going to waste,” reported Ms. Just.

At 880 pounds of the total sorted, food waste made up the largest category. “This isn’t surprising,” said Ms. Just. “Food waste makes up about 14% of the waste going into landfills, across the nation and contributes to greenhouse gas emissions. Backyard composting is a good idea, even in the desert!”

If you have any questions about recycling and solid waste in Los Alamos County please call the Eco Station at 505-662-8163. Thank you for recycling.

