

2005 Annual Report

Los Angeles County Countywide Integrated Waste Management Plan



"Enhancing our communities through responsive and effective public works services"



Countywide Summary Plan and Siting Element

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County of Los Angeles, Department of Public Works
June 2007

Role of Public Works

- Advise Board of Supervisors on waste management issues
- Develop and administer the Countywide Siting Element (Disposal Plan)
- Plan for Countywide disposal needs (15 years)
- Analyze annual disposal capacity need



Solid Waste Management Planning

Countywide Siting Element Goals and Policies

- Support in-County disposal capacity
- Use out-of-County disposal capacity
- Support in-County infrastructure for exporting solid waste (transfer & rail loading)
- Promote alternatives to landfilling and incineration



Sunshine Canyon Landfill

2005 Annual Report Overview

Section 1: Countywide Summary Plan Assessment

- Revisions to Summary Plan
- Regional Issues

Section 2: Countywide Siting Element Assessment

- Changes in Permitted Capacity
- Strategy for Maintaining Adequate Disposal Capacity
- Waste Plan Conformance

Countywide Summary Plan Assessment

Revisions to the Summary Plan

- Changes in goals and policies
- Update on Countywide programs
- Changes in the Countywide solid waste management system



Countywide Summary Plan Assessment

Regional Issues

- Solid waste management
- Processing capacity
- Markets for recovered materials



Countywide Summary Plan Assessment

Regional Issues Continued

- State Disposal Reporting System
- AB 939 compliance
- Waste reduction



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Countywide Siting Element Assessment

Changes in Permitted Capacity

- Expanded Landfills
 - Puente Hills Landfill
 - Increase to 13,200 tons per day
 - Increase of 10 years of life



Countywide Siting Element Assessment

Changes in Permitted Capacity

- Proposed Landfill Expansions
 - Sunshine Canyon Landfill
 - Lancaster Landfill & Recycling Center
 - Antelope Valley Landfill
 - Bradley Landfill
 - Peck Road Gravel Pit

Maintaining Adequate Disposal Capacity

Goals and Policies

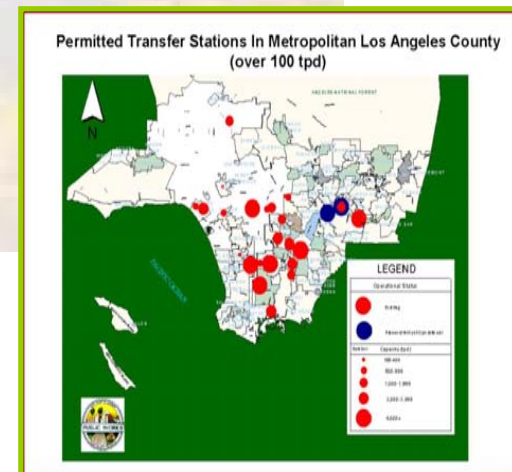
- Expand in-County capacity
- Facilitate the use of out-of-County/remote disposal facilities
- Foster development of transformation facilities & alternative solid waste disposal technologies



Current Countywide Disposal Capacity & Need

Transfer Station/Materials Recovery Facilities (MRFs)

- 29 Permitted larger-volume transfer stations/MRFs (>100 tpd)
- 5 Permitted large-volume City maintenance yards (> 100 tpd)
- Numerous small-volume transfer stations (< 100 tpd)
- Total available transfer processing capacity is approximately 60,000 tpd
- 2005 average daily tonnage is 29,000 tpd

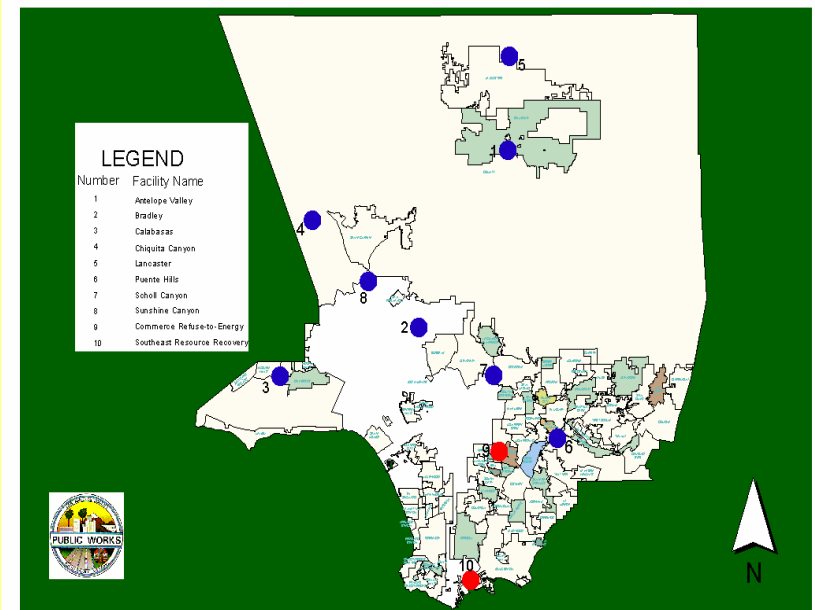


Current Countywide Disposal Capacity & Need

Existing Facilities

- 8 Major solid waste landfills
- 4 Small solid waste landfills
- 2 Waste-to-energy facilities

Major Permitted Disposal Facilities in Los Angeles County



Current Countywide Disposal Capacity & Need

<u>Remaining Permitted Landfill Capacity (as of 1/1/06)</u>			
Landfill	2005 Disposal Rate (tons/day)	Capacity (million tons)	Life (years)
Antelope Valley	1,189	10.21	28
Bradley	864	0.09	0.33
Calabasas	1,772	8.81	24
Chiquita Canyon	4,965	13.74	9
Lancaster	1,503	13.60	6
Puente Hills	12,543	32.30	8
Scholl Canyon	1,452	6.80	15
Sunshine Canyon County	4,521	1.95	2
Sunshine Canyon City	1,831	7.20	5
Total	30,640	95.00	

Current Countywide Disposal Capacity & Need

2005 Disposal Quantities (All Jurisdictions in LA County)

Los Angeles County	Tons/Year (millions)	Tons/Day
In-County Solid Waste Landfills	9.6	30,700
Waste-to-Energy Facilities	0.5	1,700
Exports to Out-of-County Solid Waste Landfills	2.2	7,000
Total	12.3	39,400
Note: Imported waste to various types of disposal facilities – 756 tpd		
Permitted unclassified landfills – 85,678 tons (275 tpd)		

Current Countywide Disposal Capacity & Need

Waste Generation Projections

- Use State-developed methodology
- Consider demographic and economic changes
- Project waste generation for a 15-year period



Disposal Capacity Need Analysis: Scenarios

Scenario 1 – Existing Condition (no expansion)

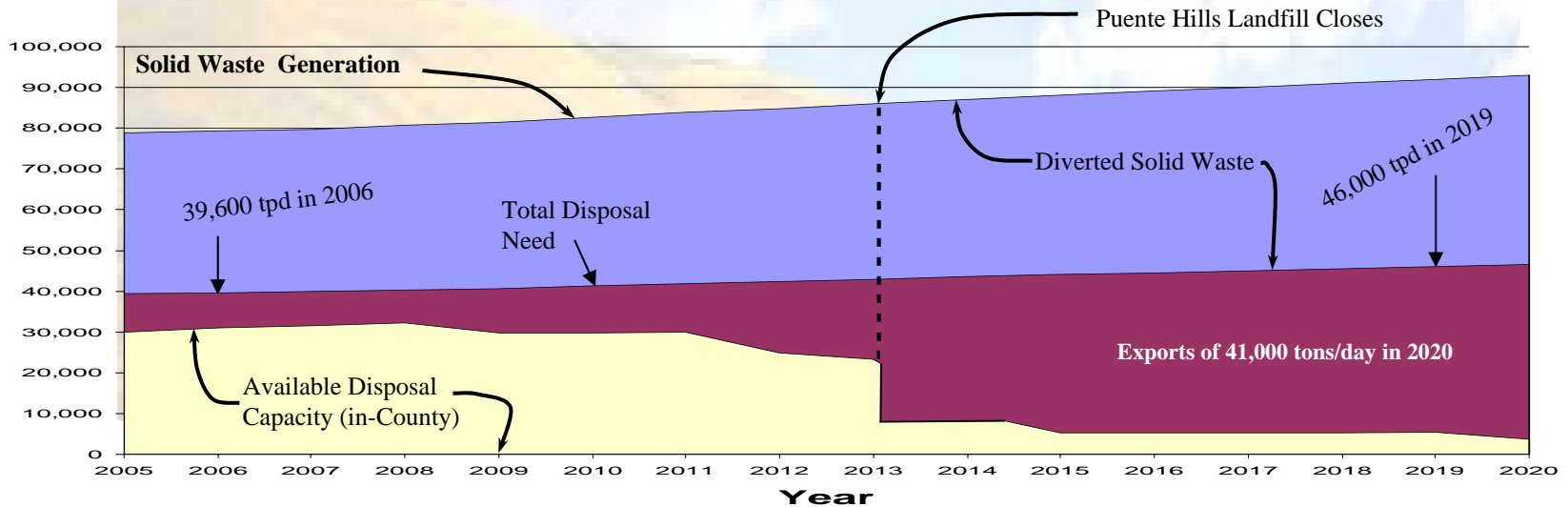
- Use of existing in-County facilities
- No landfill expansions
- Available out-of-County capacity of 10,000 tpd (2008-2020)
- *Shortfall* of 230 tpd by 2011, up to 31,000 by 2020



Disposal Capacity Need Analysis: Scenarios

Scenario 1 – Existing Condition (assumes 50% Countywide recycling rate, no landfill expansions, and no conversion technology, full reliance on in-County landfills)

Daily Solid Waste Quantity (Tons)



Disposal Capacity Need Analysis: Scenarios

Scenario 2 (no exports)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- No out-of-County facilities would be used
- *Shortfall* by 2006 of 6,250 tpd. The shortfall would temporarily disappear upon the expansion of the Sunshine Canyon Landfill. By 2011, there will be a shortfall of 330 tpd increasing to 19,400 tpd by 2020.

Disposal Capacity Need Analysis: Scenarios

Scenario 3 (expansions and exports)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- Exports to out-of-County facilities of up to 10,000 tpd
- *Shortfall* of 5,800 tpd by 2014, up to 10,200 by 2020

Disposal Capacity Need Analysis: Scenarios

Scenario 4 (conversion technology)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- Use of conversion technology for up to 3,000 tpd
- Available out-of-County capacity of 20,000 tpd by 2014
- *No shortfall*

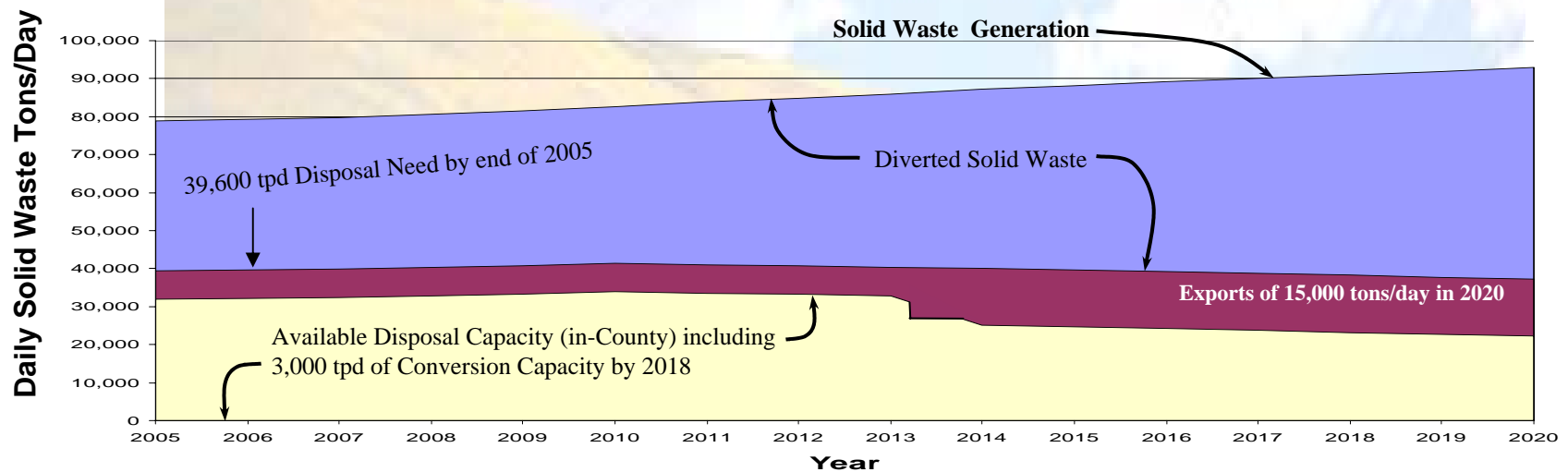
Disposal Capacity Need Analysis: Scenarios

Scenario 4 – Alternate, Best Case Scenario (conversion technology and increased diversion)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- Use of conversion technology beginning 2014 with 1,500 tpd, up to 3,000 tpd by 2020
- Available out-of-County capacity of 15,000 tpd by 2014 through 2020
- Increase in diversion at the rate of 1% per year beginning in 2011, up to 60% by 2020
- *No shortfall*

Disposal Capacity Need Analysis: Scenarios

Scenario 4 – Alternate, Best Case Scenario (assumes 60% Countywide diversion rate by 2020; development of conversion technology up to 3,000 tpd by 2018, expansion of all in-County landfills, and use of out-of-County facilities of up to 15,000 tons/day by 2014)



Disposal Capacity Need Analysis: Scenarios

Scenario 5 (full reliance on exports, no conversion technology)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- Available out-of-County capacity of 20,000 tpd by 2014, up to 22,000 by 2020
- *No conversion technology*
- *No shortfall*

Disposal Capacity Need Analysis: Scenarios

Scenario 5 – Alternate (expansions, increased diversion, exports, no conversion technology)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- Available out-of-County capacity of 15,000 tpd by 2014, through 2020
- Increase in diversion at the rate of 1% per year beginning in 2011, up to 60% by 2020
- *No conversion technology*
- *No shortfall*

Disposal Capacity Need Analysis: Scenarios

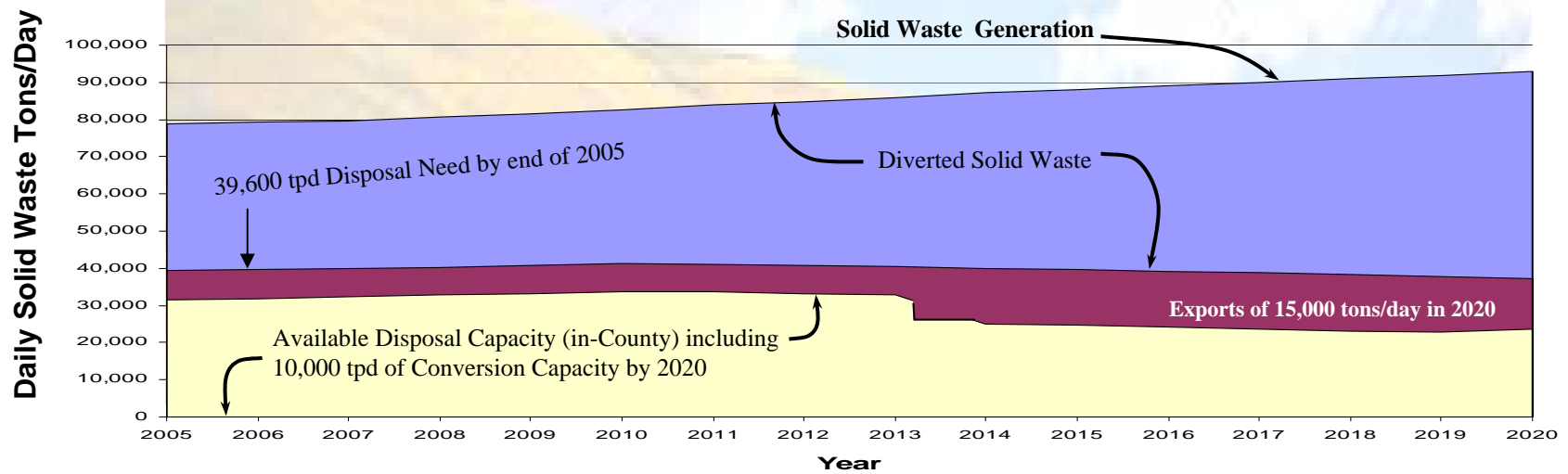
Maximum Conversion Technology Development Scenario (conversion technology, and increased diversion)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- Use of conversion technology beginning in 2010 with 1,200 tpd, up to 10,000 tpd by 2020
- Available out-of-County capacity of 15,000 tpd by 2014 through 2020
- Increase in diversion at the rate of 1% per year beginning in 2011, up to 60% by 2020
- Considers City of Los Angeles' and County of Los Angeles' efforts to develop conversion technology
- *No shortfall*

Disposal Capacity Need Analysis: Scenarios

Maximum Conversion Technology Development Scenario

(assumes 60% Countywide diversion rate by 2020; development of conversion technology up to 10,000 tpd by 2020, expansion of all in-County landfills, and use of out-of-County facilities of up to 15,000 tons/day by 2014)



Disposal Capacity of Unclassified Inert Debris/Engineered Fill Disposal Sites in Los Angeles County

- 3 Permitted unclassified inert waste operations and
- 11 Inert debris engineered fill operations/unpermitted landfills in Los Angeles County
- Available daily capacity of 32,000 tpd, as of January 1, 2006
- Average daily disposal 16,570 tpd in 2005
- 5.2 million tons disposed in 2005

Summary of Out-of-County Landfills

Landfill	2005 Exported Quantity (tpd)	Anticipated Maximum Exports	Capacity (million tons)	Life (years)
El Sobrante	2,840	4,000	118.6	40
Frank R. Bowerman	810	1,500	42.4	16
Olida Alpha	1,100	1,500	18.9	7
Prima Desecha	1,100	1,500	73.0	60
Simi Valley	730	1,000	18	26
Mesquite Regional*	-	15,000	600	100
Eagle Mountain**	-	15,000	670	100

Note: * Expected to be operational by 2009

** Currently not operational and remains in litigation since 1999

2006 MSW Disposal Quantities

(All Jurisdictions in LA County)

<u>Los Angeles County</u>	<u>2006 Disposal Rate Tons/Year</u>	<u>2006 Disposal Rate Tons/Day</u>	<u>% of Total</u>
In-County Solid Waste Landfills	9.7 million	31,100	80%
Waste-to-Energy Facilities	0.6 million	1,600	5%
Exports to Out-of-County Solid Waste Landfills	1.8 million	5,800	15%
Total Disposal	12.1 million	38,500	
Notes: Tons/Day = 6-day/week Imported waste to various types of disposal facilities – 450 tpd Permitted unclassified landfills – 100,000 tons (320 tpd)			

Remaining Permitted Capacity for In-County Landfills as of January 1, 2007

<u>Landfill</u>	<u>2006 Disposal Rate (tons/day)</u>	<u>Remaining Capacity (millions tons)</u>	<u>Remaining Life (years)</u>
Puente Hills	12,250	28.5	7
Chiquita Canyon	4,930	12.2	8
Sunshine Canyon (City)**	4,120	5.9	4*
Sunshine Canyon (County)	2,690	1.1	1*
Calabasas	1,620	8.3	15
Scholl	1,430	6.4	14
Lancaster***	1,240	17.5	5
Antelope Valley	980	9.8	26
Bradley****	1,450	0.0	>1

Total Disposal

30,710

89.7

* On 2/6/07, the Board of Supervisors approved a new CUP establishing a 30-year life. Provided certain conditions are met, the total available capacity of the combined landfills is 74.3 million tons

** City of LA portion opened July 2005, currently operating at 4,400 tons per day

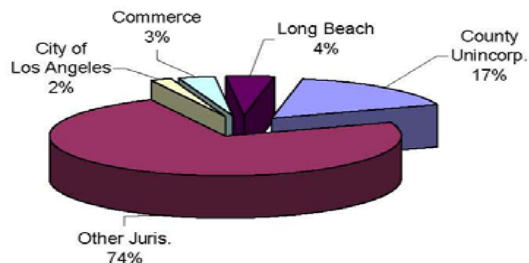
*** Lancaster Landfill's current CUP expires August 2012

******Bradley Landfill closed April 2007**

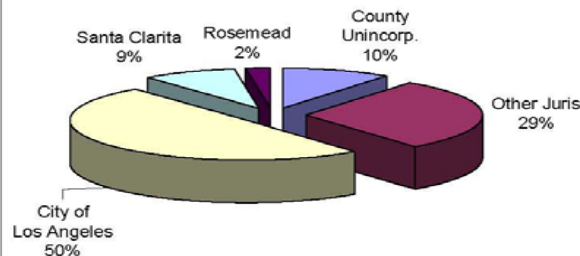
Remaining capacity is based on annual landfill operator survey and other info on file with Public Works

2006 Solid Waste Disposal by Jurisdiction of Origin for Major Landfills and Waste-to-Energy Facilities

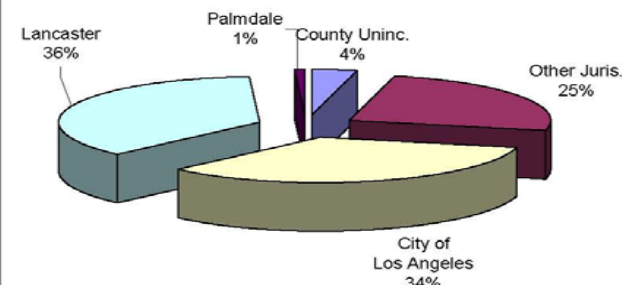
**Puente Hills Landfill
(3.8 Million Tons)**



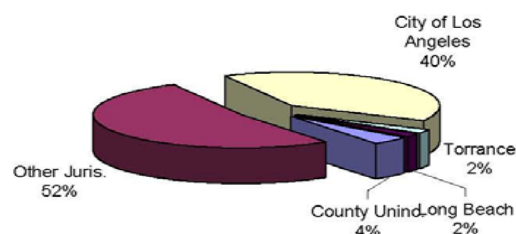
**Chiquita Canyon Landfill
(1.5 Million tons)**



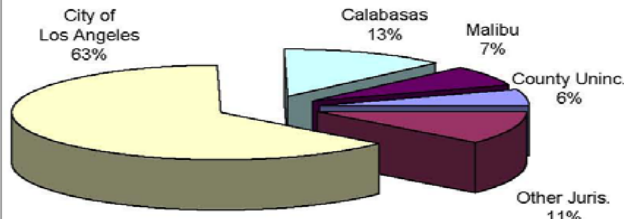
**Lancaster Landfill
(0.4 Million tons)**



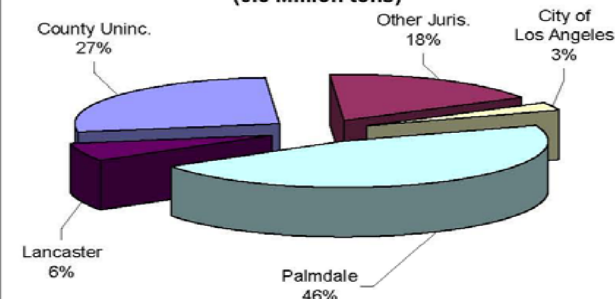
**Sunshine Canyon (City) Landfill
(2.4 Million tons)**



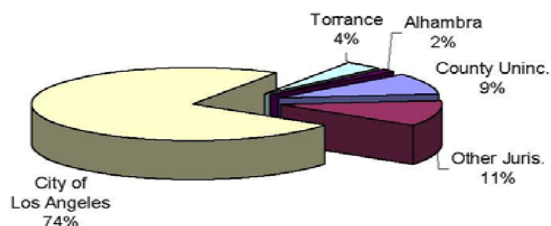
**Calabasas Landfill
(0.5 Million tons)**



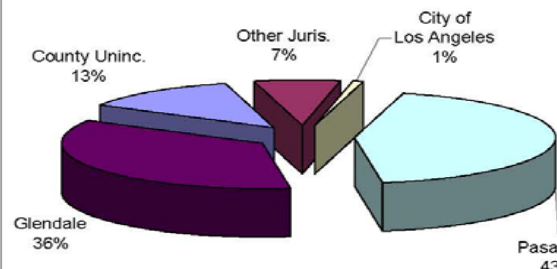
**Antelope Valley Landfill
(0.3 Million tons)**



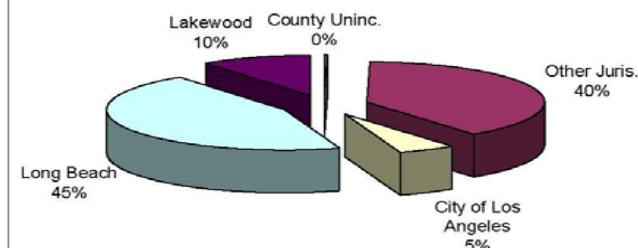
**Sunshine Canyon (County) Landfill
(0.8 Million tons)**



**Scholl Canyon Landfill
(0.4 Million tons)**

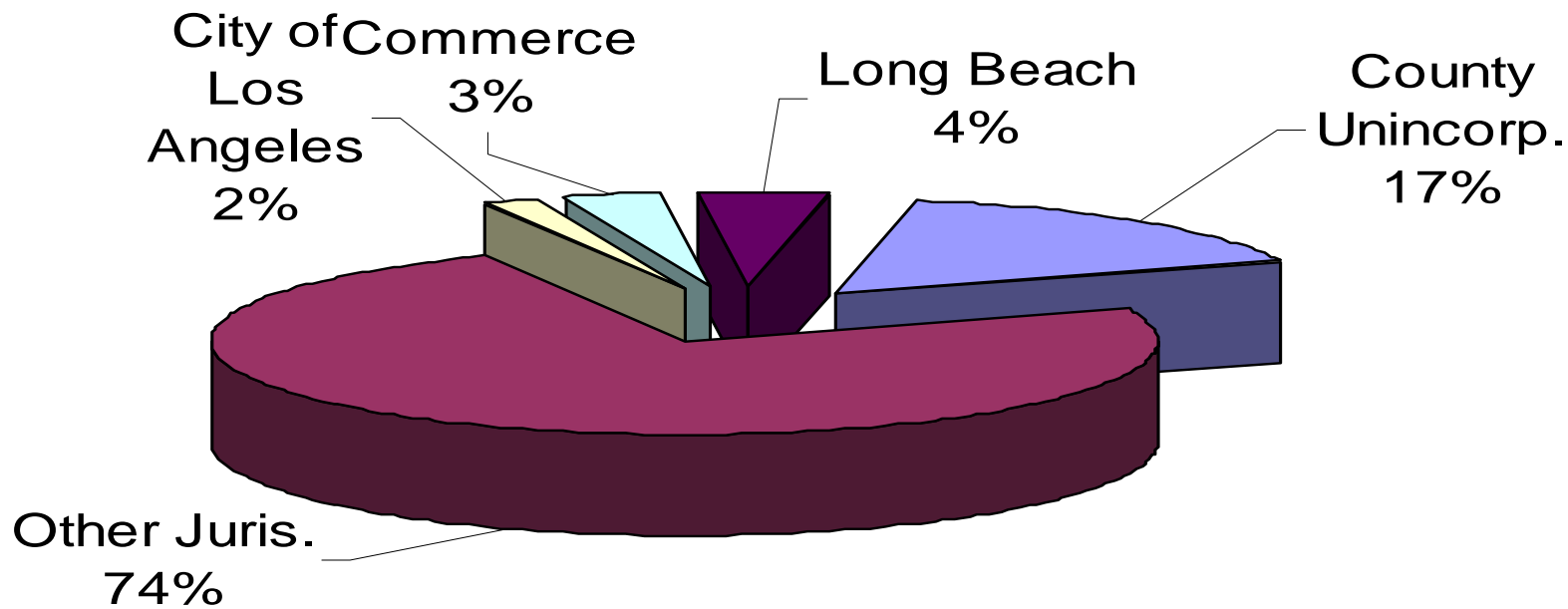


**Southeast Resource Recovery
(Waste-to-Energy) Facility
(0.5 Million tons)**



2006 Solid Waste Disposal by Jurisdiction of Origin for Major Landfills and Waste-to-Energy Facilities

Puente Hills Landfill (3.8 Million Tons)

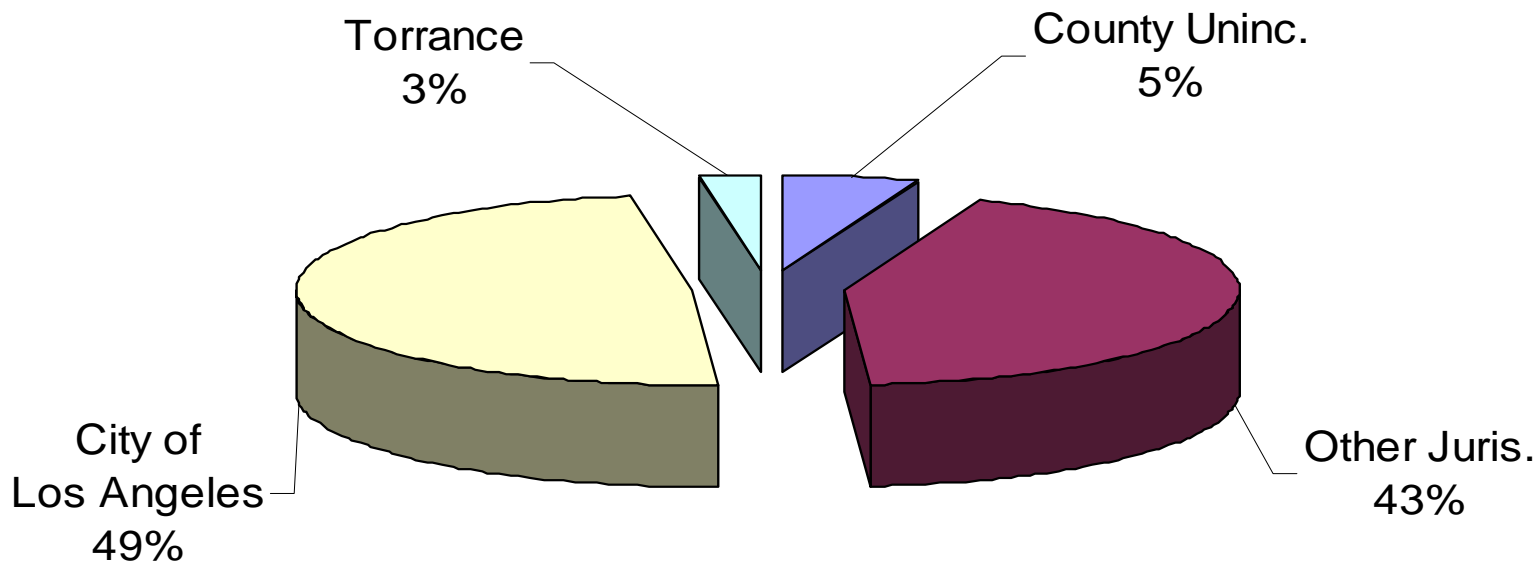


Note: Puente Hills Landfill accepts approximately 330,000 tons/year or about 47% of the County's green waste for cover material

- Puente Hills Landfill receives 3.8 million tons/year or about 30% of the total County waste

2006 Solid Waste Disposal by Jurisdiction of Origin for Major Landfills and Waste-to-Energy Facilities

Combined Sunshine Canyon City and County Landfills (3.2 Million Tons)



Note: Sunshine Canyon County/City Landfill receives 3.2 million tons/year or about 26% of the total County waste

Disposal Capacity Need Analysis: In Conclusion

What's Needed

- Maximize waste reduction efforts
- Maximize the use of in-County disposal capacity
- Use out-of-County disposal capacity



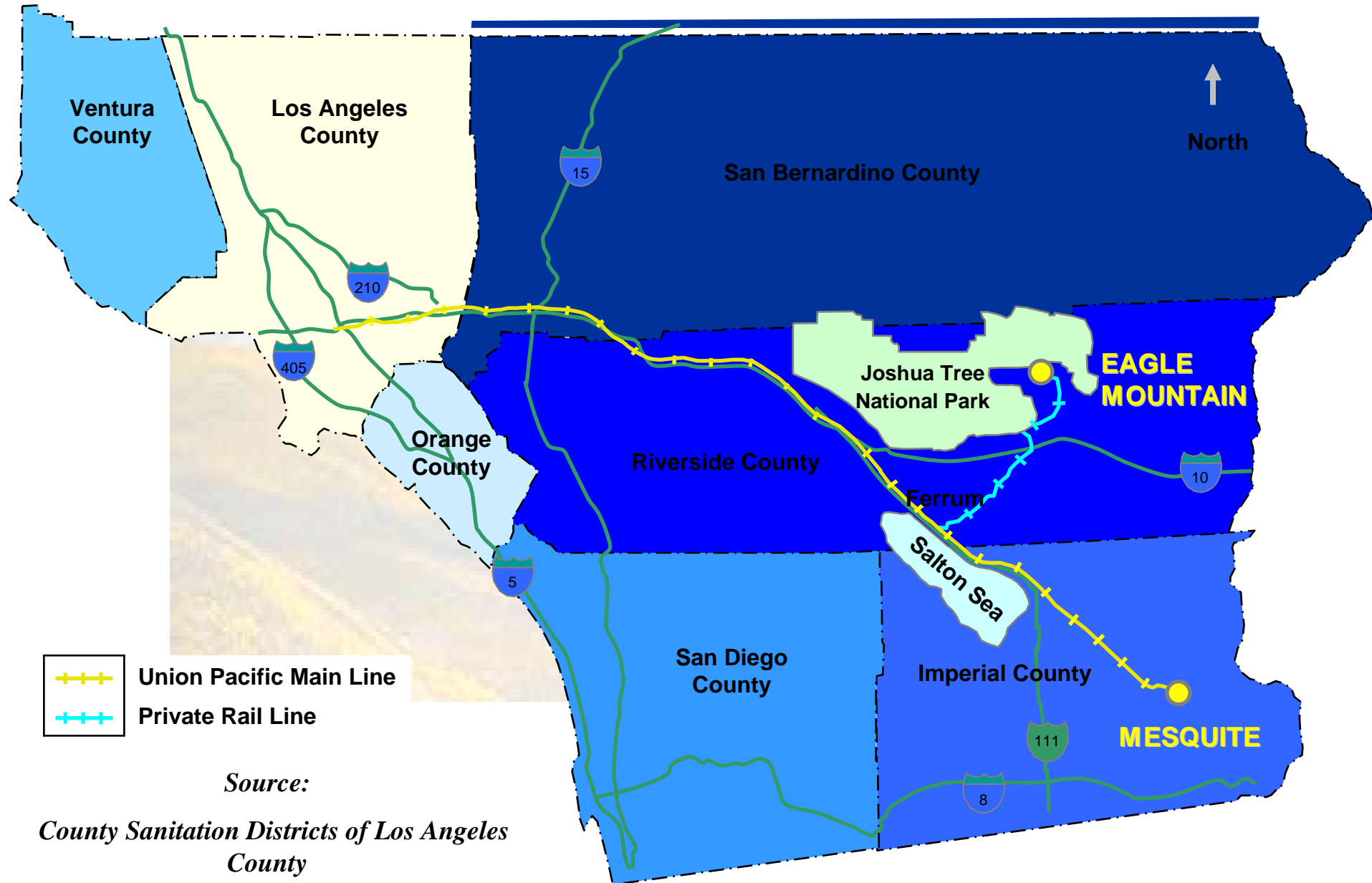
Disposal Capacity Need Analysis: In Conclusion

What's Needed

- Develop in-County infrastructure to facilitate exportation of waste to out-of-County facilities (transfer & rail loading)
- Expand efforts to encourage development of alternatives to landfilling, e.g. conversion technologies



Disposal Capacity Need Analysis: In Conclusion



Questions?



For more information on solid waste management in Los Angeles County, please visit www.SolidwasteDRS.org