

NCTCOG WESTERN AREA WASTE REGIONAL WORKSHOP

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North Central Texas Council of Governments



Introduction

Michael Carleton

- *Project Manager with Arredondo, Zepeda & Brunz LLC*
- *35 years experience in energy and environmental programs*
- *3600 acres of Landfill Site Selections for BVSWMA, Corpus Christi, Lubbock and TASWA*
- *Permitting Experience for Laredo, BVSWMA, Arlington and 12 landfills/transfer stations*
- *Solid Waste Management Plans including Fort Worth, Arlington, Burleson and NCTCOG*
- *Energy from Waste Experience*

- *Recently presented to NCTCOG an assessment of regional disposal capacity and benchmarking analysis of waste disposal comparisons*

AZ&B is a 36 year old
Dallas / Fort Worth
based planning,
engineering and surveying
firm

Discussion Topics

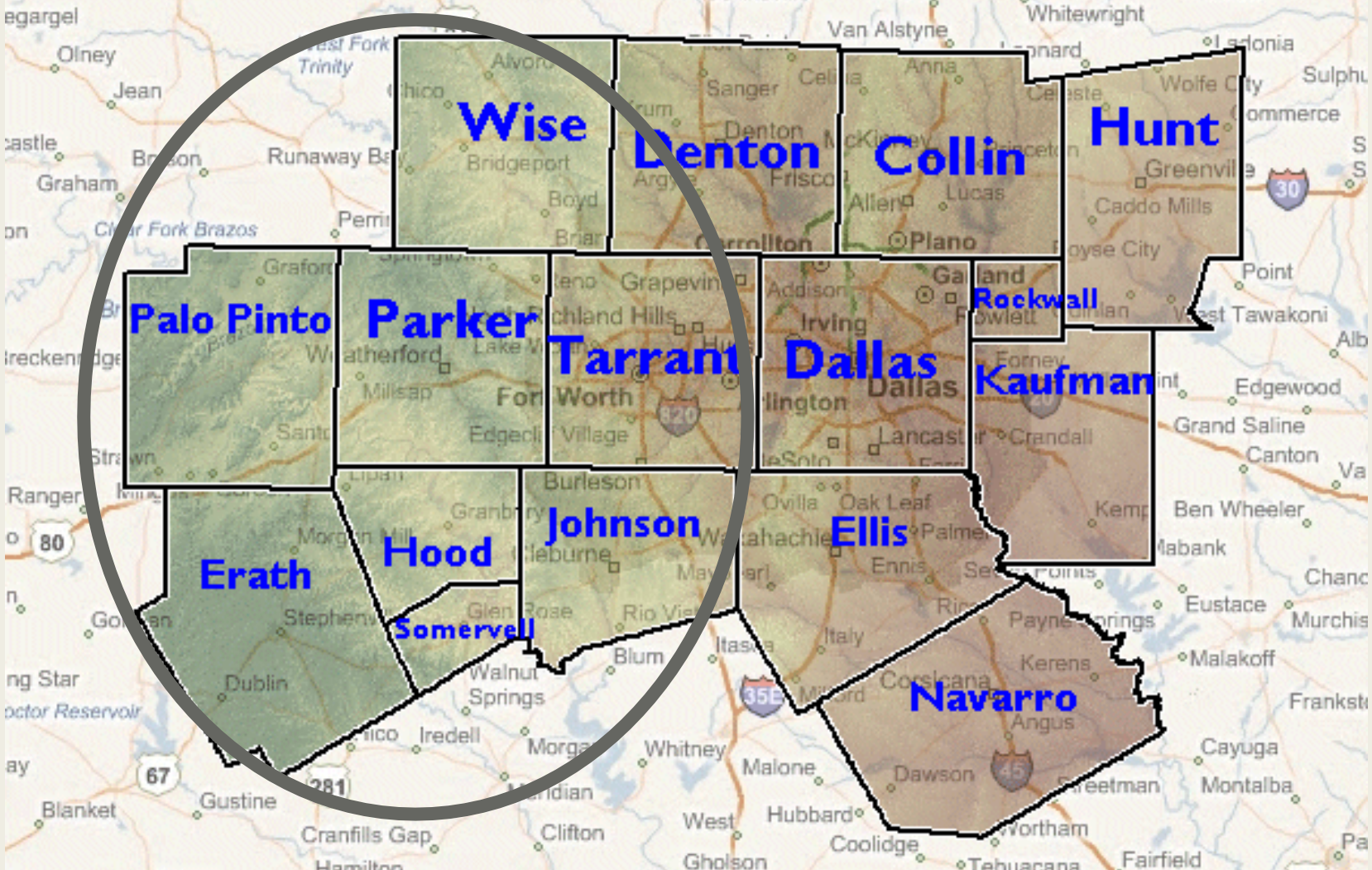
- Waste management issues in western NCTCOG Region including forecasted waste generation & disposal
- Requirements for new capacity and transfer options
- Regional opportunities for solving problems
- Future discussion of needs, options and solutions
- Source reduction, recycling, organics management, etc.

In 2016, the NCTCOG region had 35 years disposal capacity.

Western region capacity is projected to be 25 to 30 years.

The estimated time to gain new capacity 10 to 15 years.

The Region



- Wise
- Tarrant
- Parker
- Palo Pinto
- Erath
- Hood
- Somervell
- Johnson

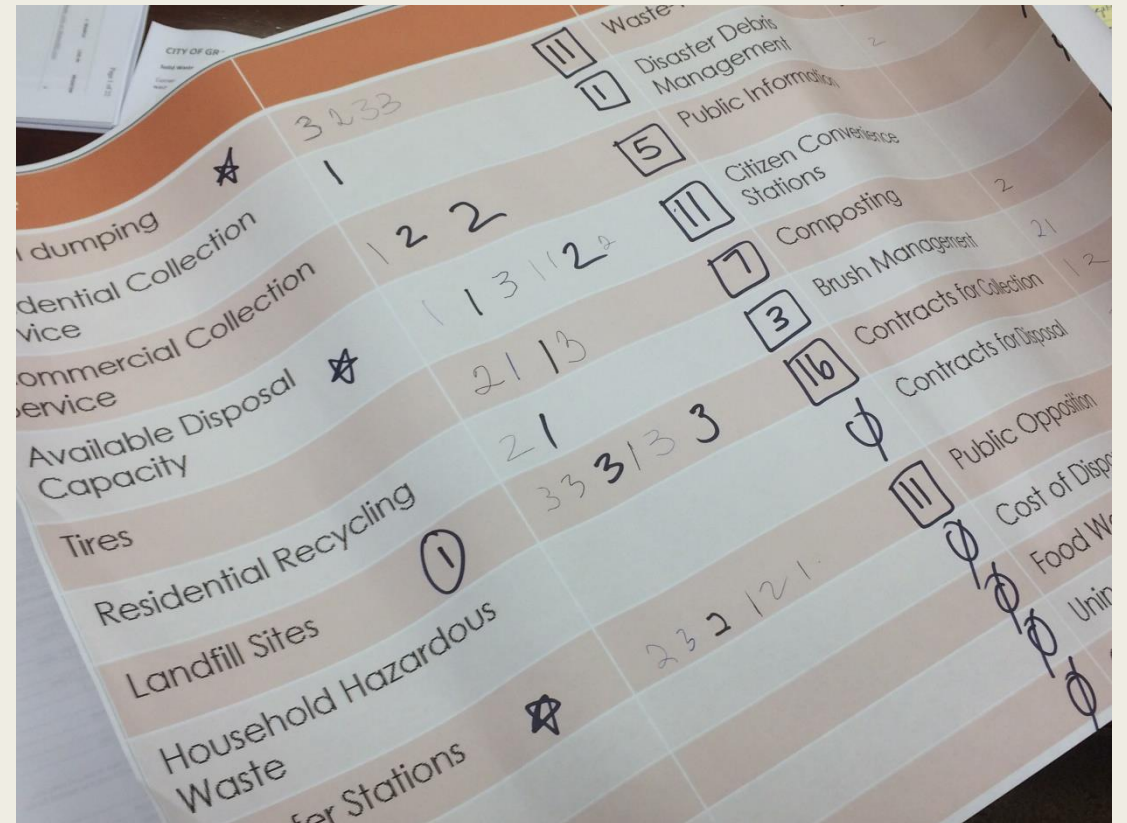
Close to the size of Connecticut

3.95 million acres

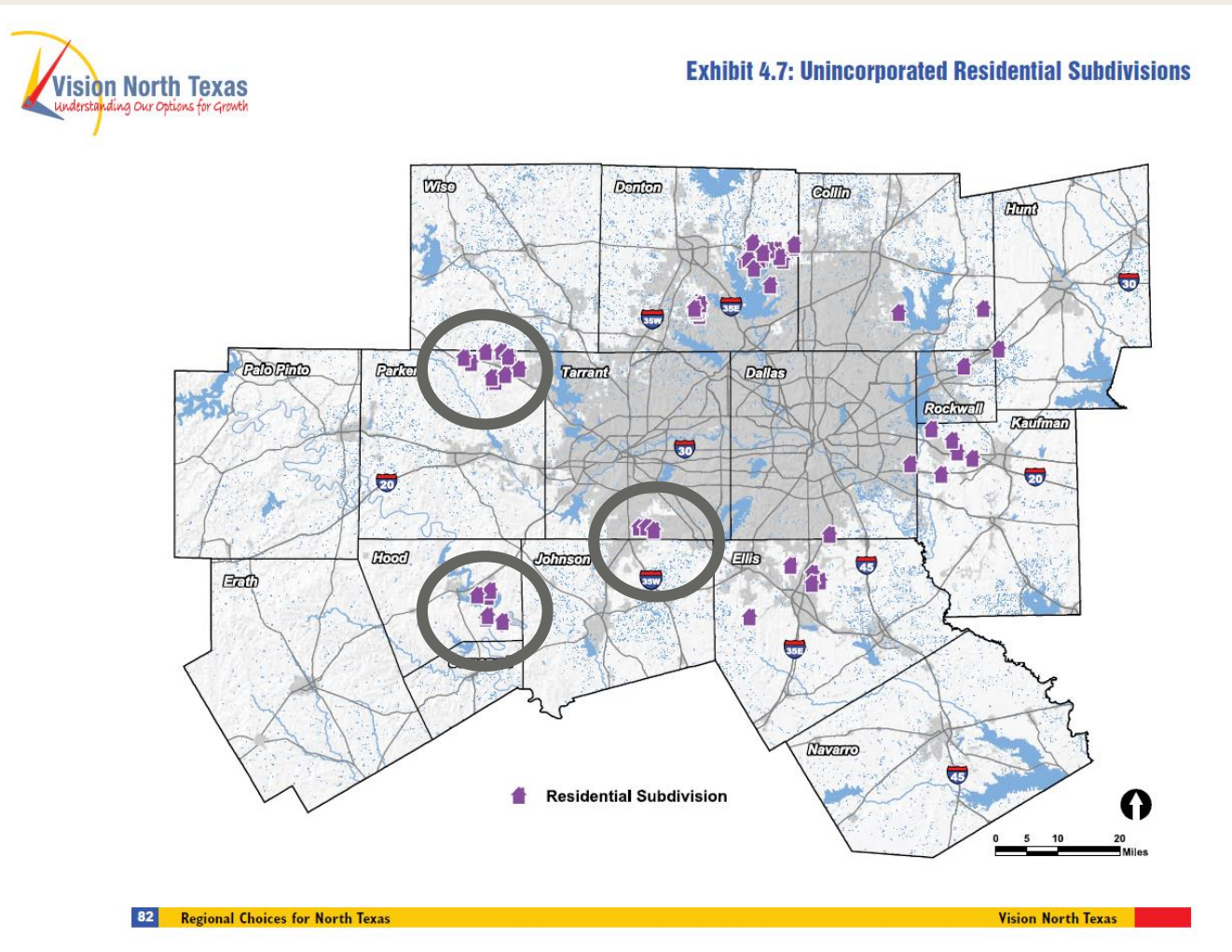
Straw Poll Results from Last Meeting

Topics important to this group

- Landfill Sites (16)
- Illegal Dumping (11)
- Available Disposal Capacity (11)
- Transfer Stations (11)
- Tires (7)
- Commercial Collection Service (5)
- Waste-to-Energy (5)

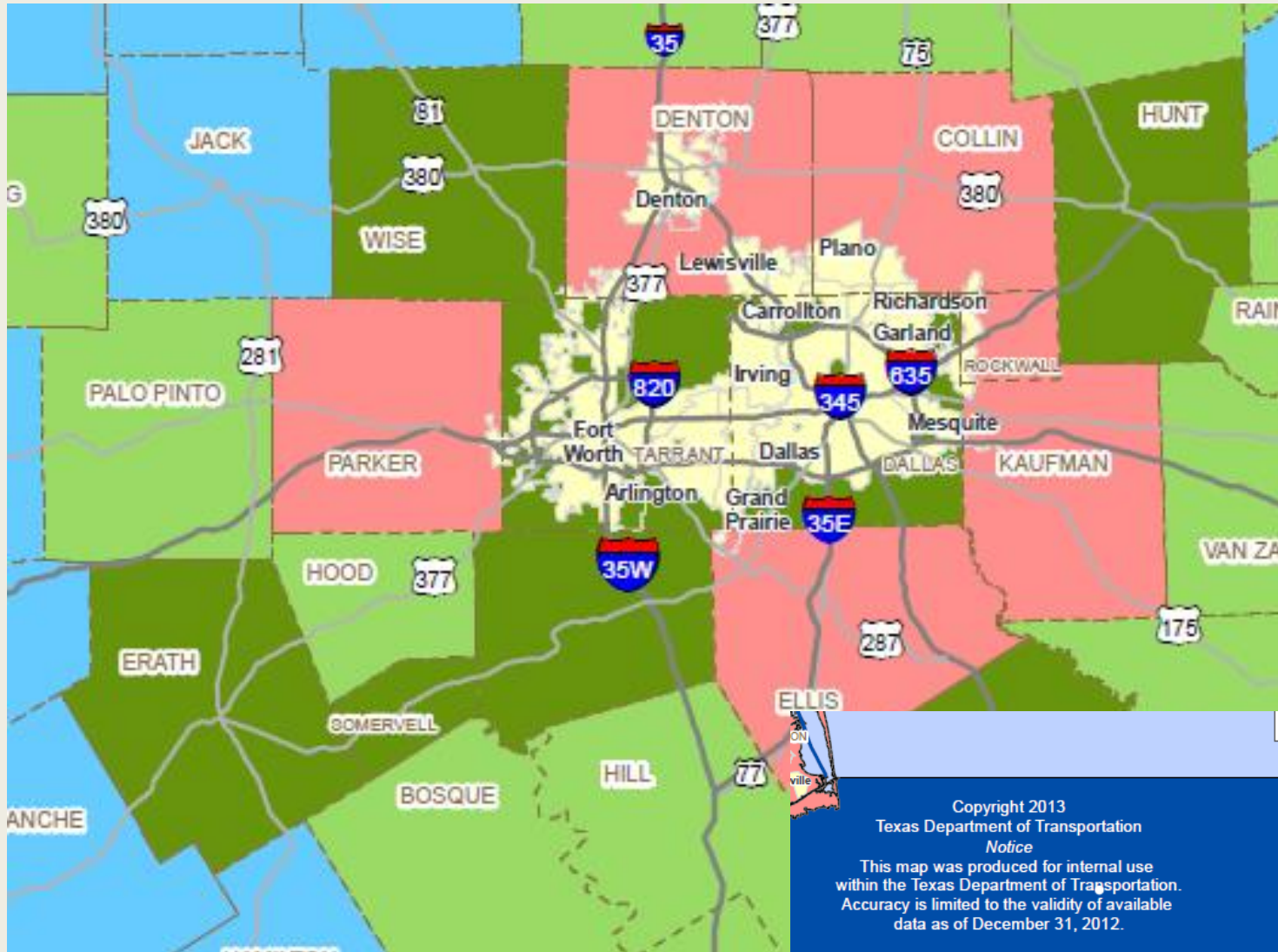


New challenges in unincorporated areas



New trend of large subdivisions built in unincorporated areas poses a new solid waste management issue for communities

Growth Projections



Projected Population Change 2013 - 2040

- 23.2% - 0%
- 0.1% - 10%
- 10.1% - 25%
- 25.1% - 50%
- 50.1% - 100%
- 100.1% - 112.9%

41% Total Projected Population Change 2013 - 2040
Source: Office of the State Demographer

- Interstate Highway
- U.S. Highway
- County Boundary
- Gulf Intracoastal Waterway
- Major City

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 Texas Department of Transportation
 Notice
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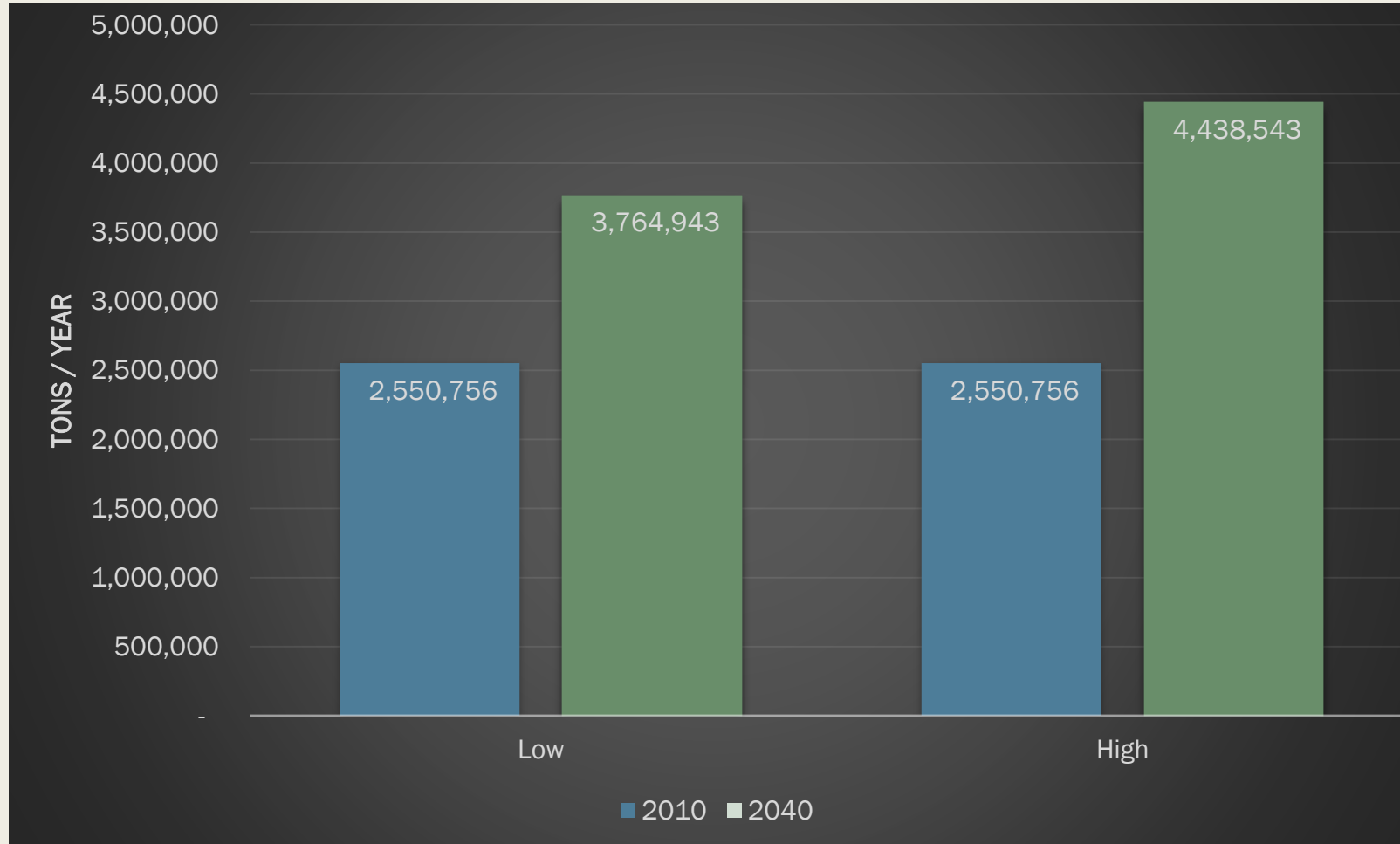
Projected Waste Disposal

Current disposal rate per capita

County	2010	2040	Change in Annual Tons	2010 tpd	2040 tpd	Change in Daily
Erath	43,287	68,646	25,359	119	188	69
Hood	40,087	56,480	16,393	110	155	45
Johnson	172,435	307,297	134,863	472	842	369
Palo Pinto	17,384	23,795	6,411	48	65	18
Parker	133,583	343,653	210,070	366	942	576
Somervell	9,699	15,347	5,648	27	42	15
Tarrant	2,066,731	3,474,271	1,407,540	5,662	9,519	3,856
Wise	67,550	149,053	81,504	185	408	223
Total	2,550,756	4,438,543	1,887,787	6,988	12,160	5,172
Pounds / Capita / Day	6.26	7.38				

	NCTCOG	HGAC	AACOG	CAPCOG
2005	8.54	7.11	7.70	7.35
2010	6.72	6.49	6.06	5.95
2013	6.89	7.00	6.35	5.58
2014	7.14	7.22	6.65	5.73
2015	7.30	7.15	6.60	5.79
2016	7.86	6.75	6.10	5.98

Projected 2040 Waste Disposal



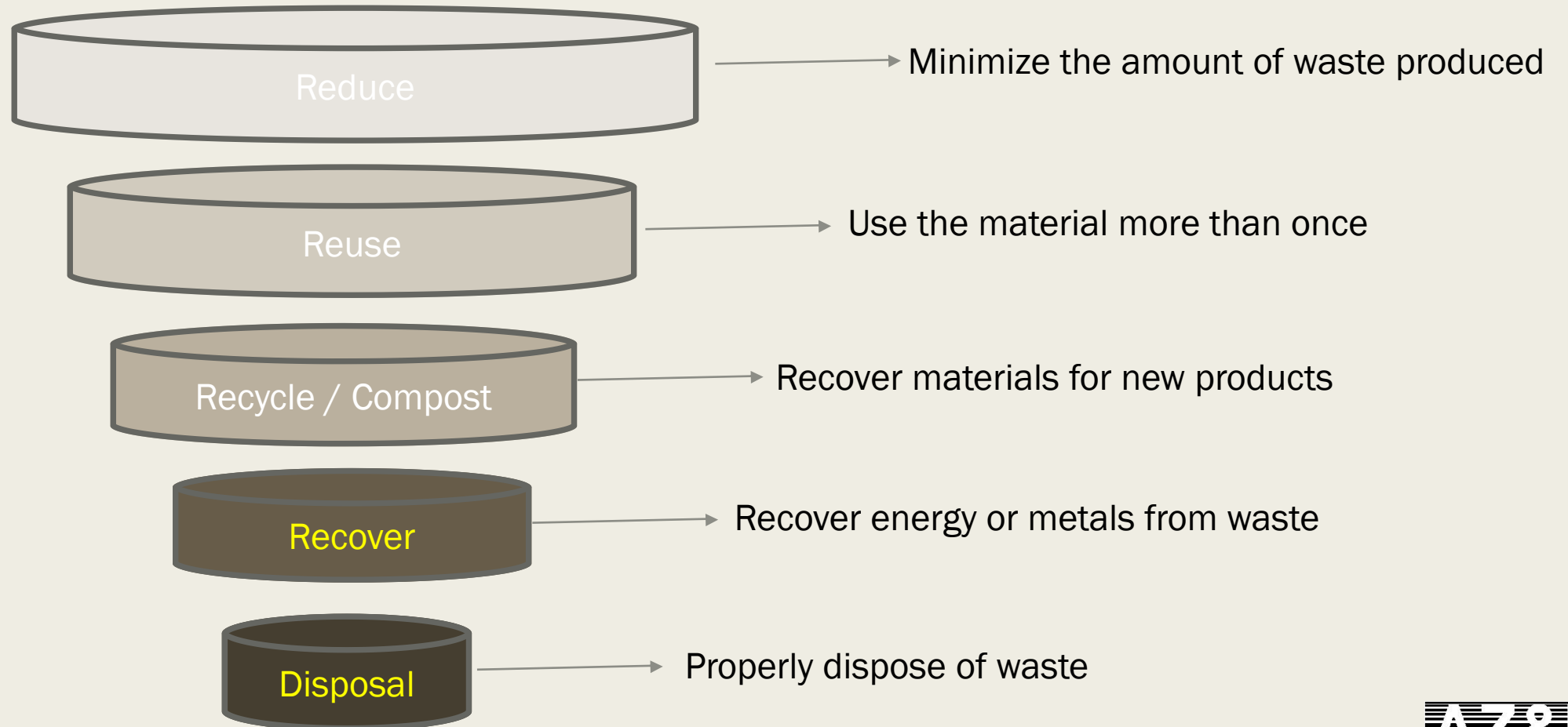
State of Iowa generates a total of 2.8 million tons per year.

Between 2018 - 2040 estimated total disposal 74 to 83 million tons of MSW.

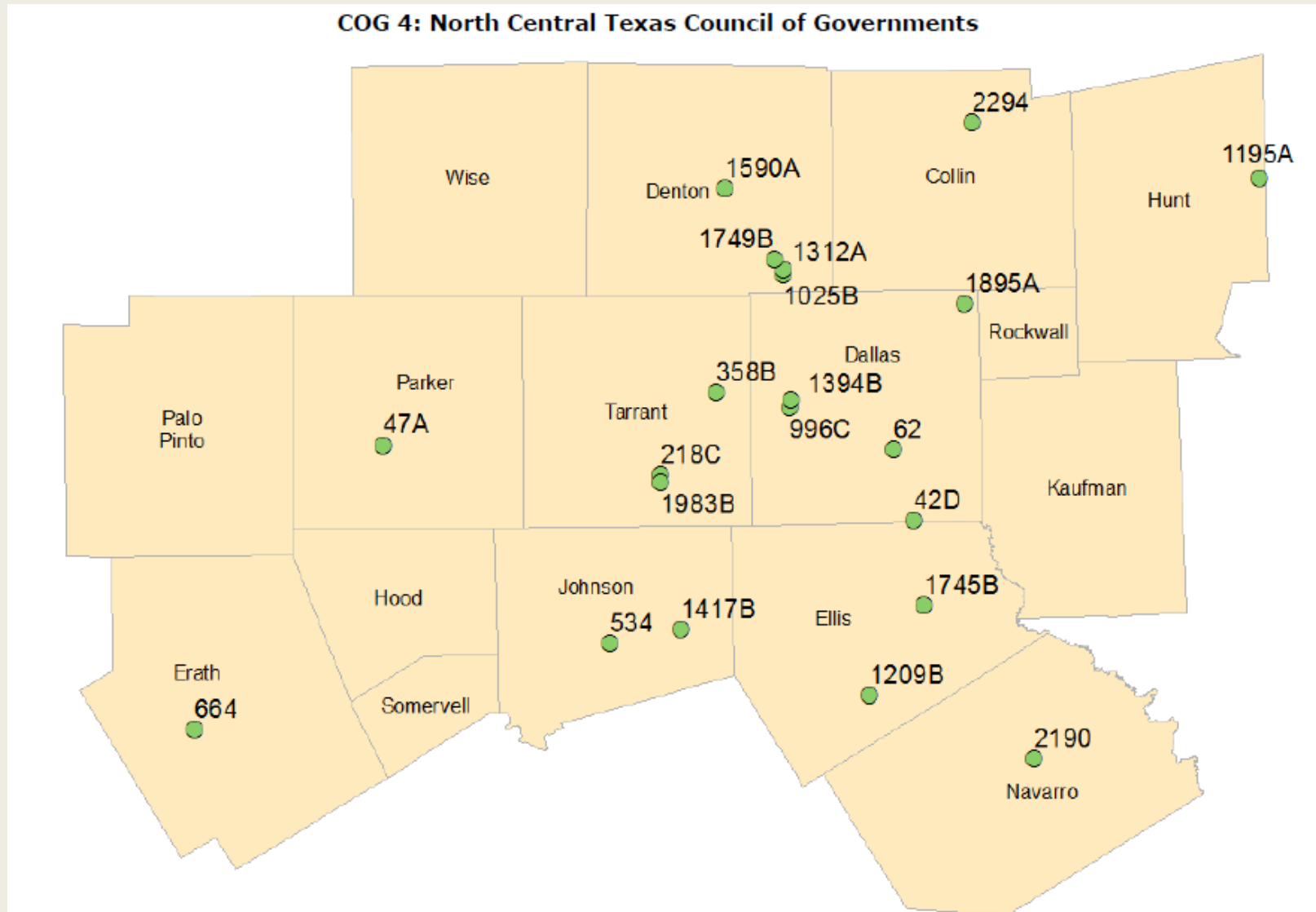
Total CURRENT disposal capacity in Western Area is 63 million tons

Low assumes waste generation rate of 6.96 pcd (2010 rate)
High assumes waste generation rate of 7.38 pcd (2016 rate)

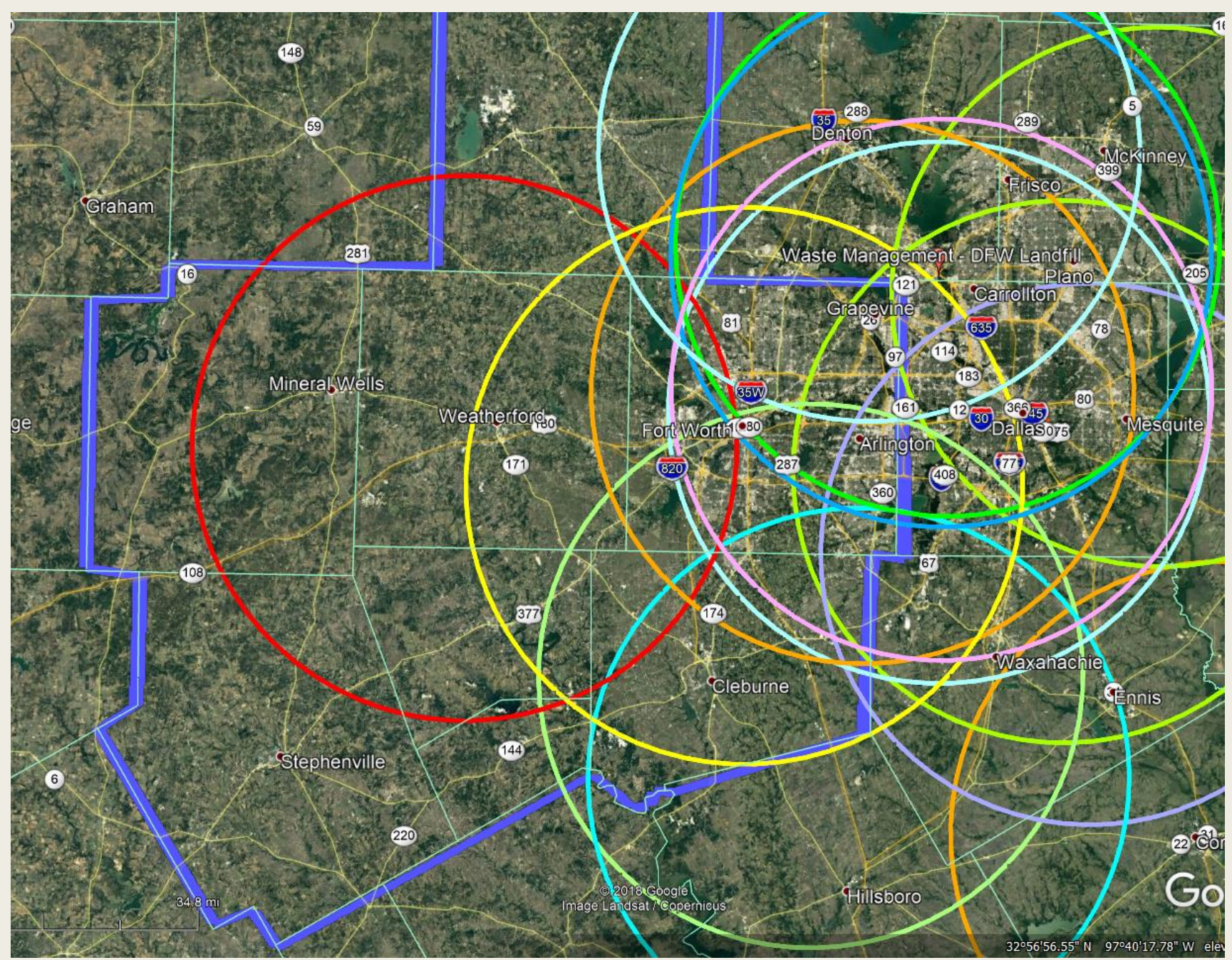
Comprehensive solid waste management



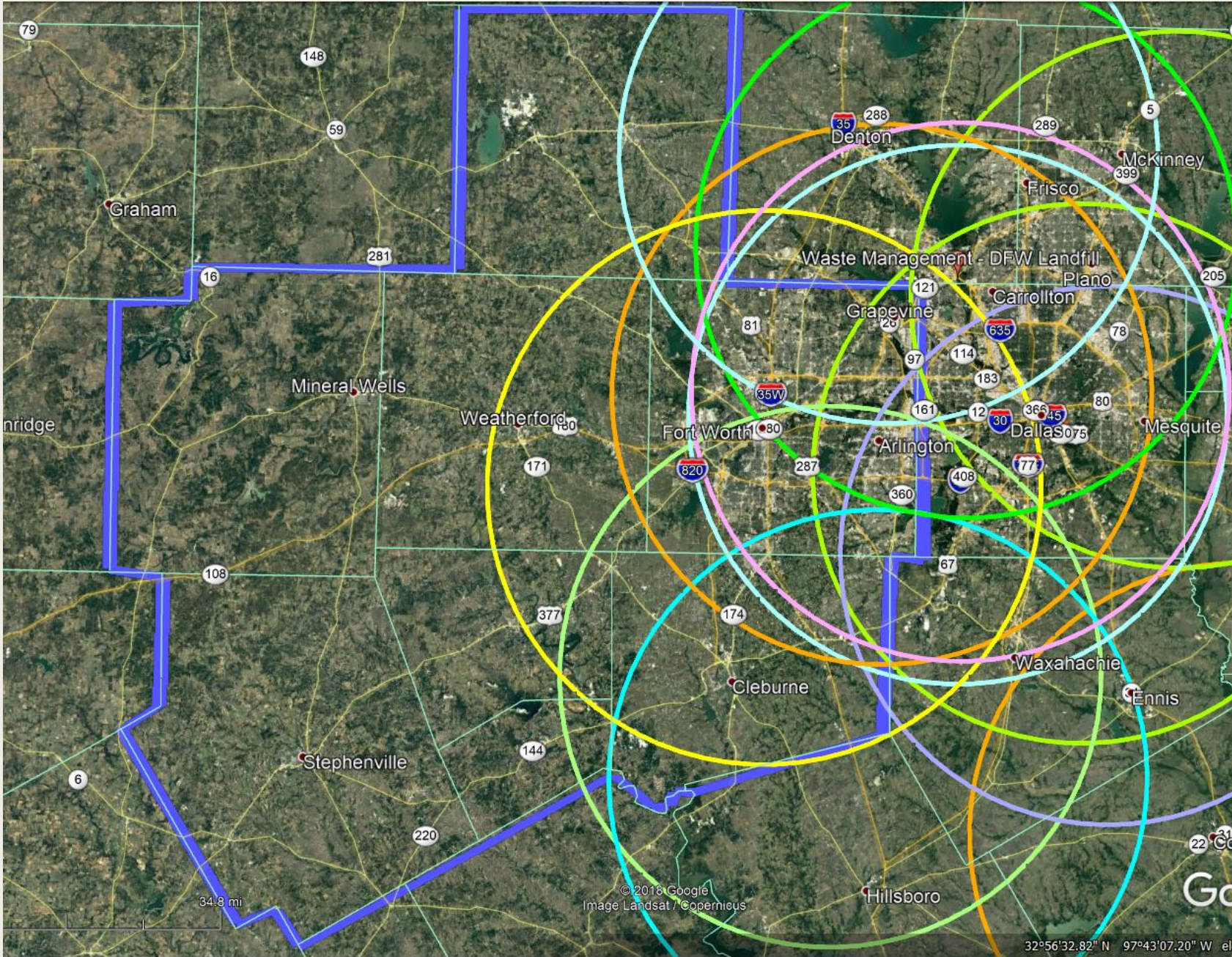
2016 Landfill Location Map



30 mile radius
to operating
regional Type I
landfills

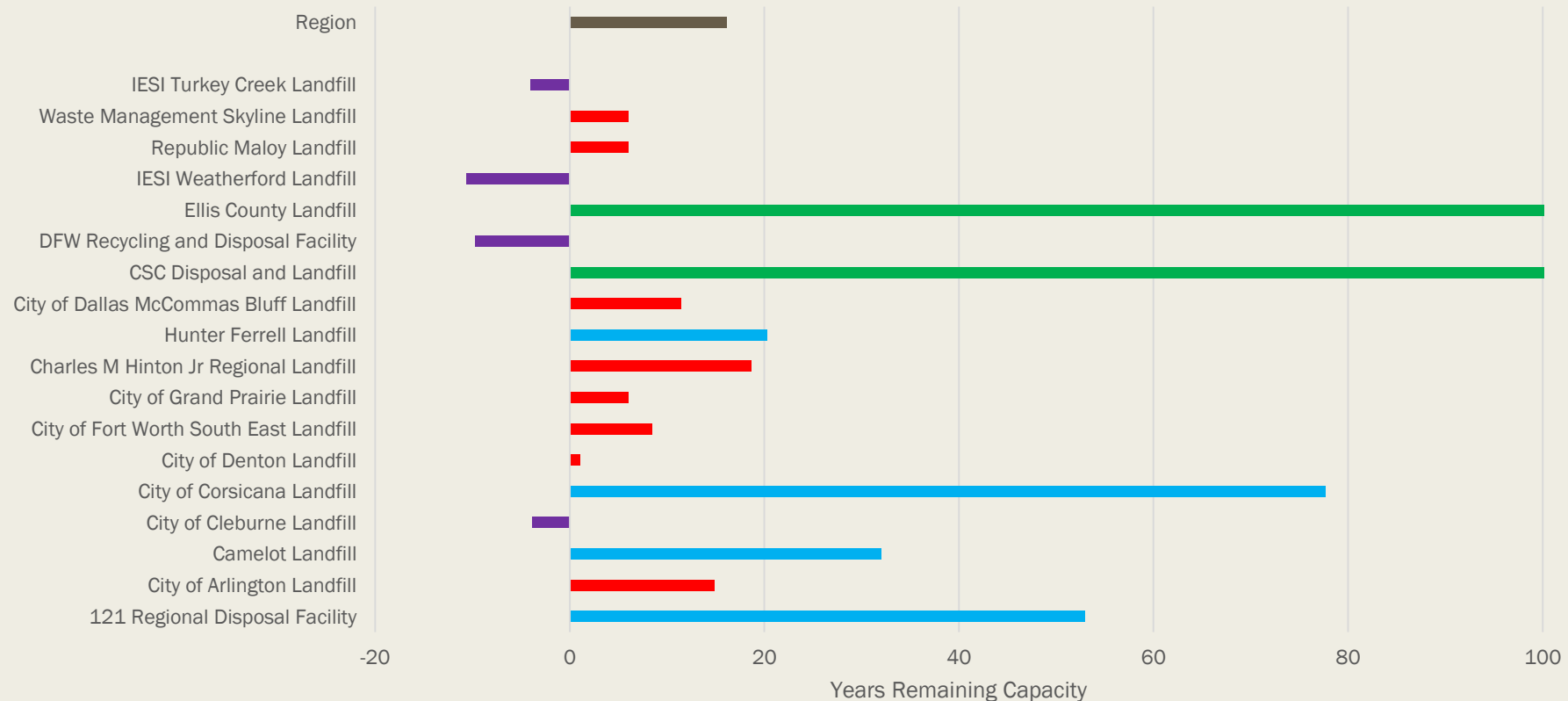


30 mile radius to operating regional Type I landfills within two to five years



2030 Projected Years of Type I MSW Capacity

NCTCOG Type I Regional Capacity 2030



Landfill Capacity

Landfill	2016 Disposed (000 Tons)	2017 Disposed (000 Tons)	2017 Capacity (000 CY)	2017 Capacity (000 Ton)	Years Remaini ng
Arlington Landfill	999	997	49,380	37,630	33
Fort Worth SE Landfill	637	557	23,260	16,480	30
Cleburne Landfill	0.7	0.7	18	90	12
Waste Connections Turkey Creek	524	591	6,930	5,049	12
Waste Connections Weatherford	207	198	830	544	3
Total	2,368	2,344	80,418	59,793	20-25
IESI Fort Worth C&D Landfill	368	367	8,101	3,985	11
Stephenville C&D Landfill	12	12	822	493	63
Total	380	379	8,923	4,478	12

*In 2017, the estimated total NCTCOG region disposed of over 10 million tons
 Estimated regional capacity is 415 million tons; 39 years
 Recognize that waste from region is going outside the region*

Processing Facilities in NCTCOG

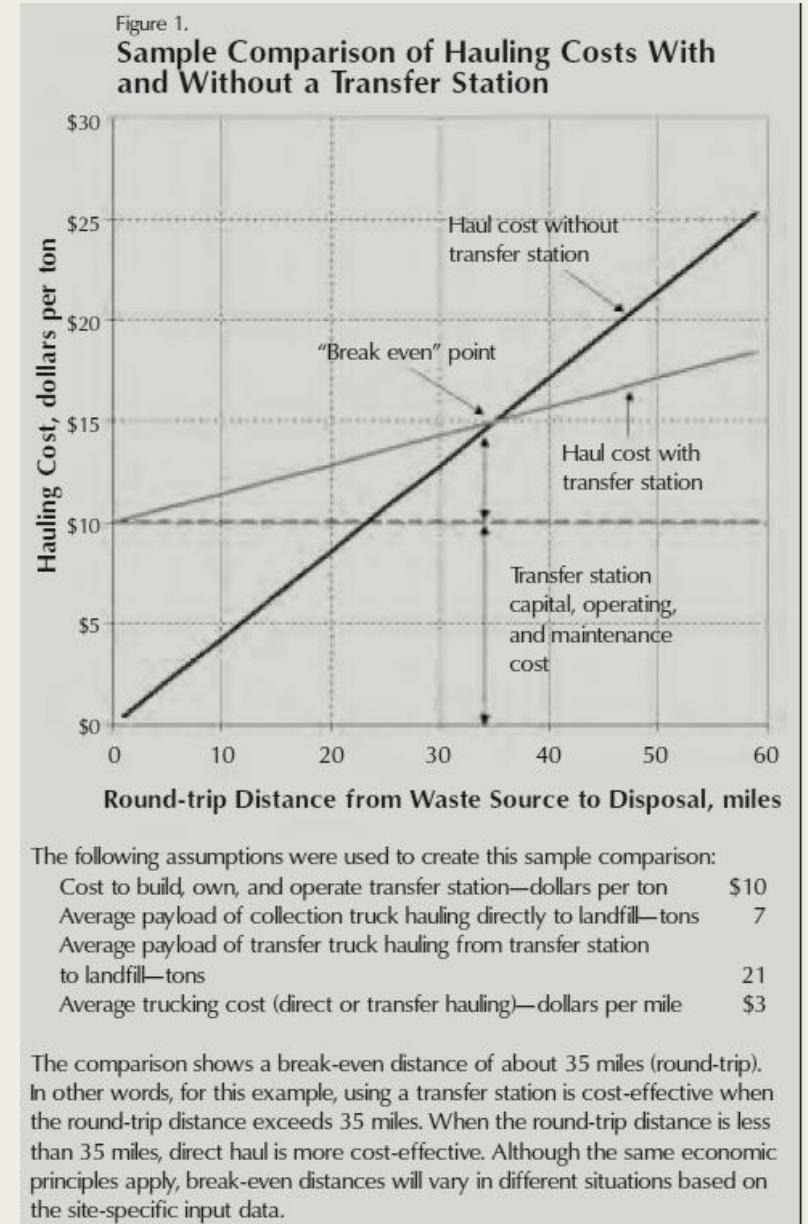
COG 4: North Central Texas Council of Governments—List of Processing Facilities

COG	Permit or Registration	Site Name	County	Type	2017 Tons
4	53A	Lookout Drive Transfer Station	Collin	5TS	158,054
4	1494	Parkway Transfer Station	Collin	5TS	128,049
4	2045A	Custer Road Transfer Station	Collin	5TS	303,503
4	40284	Town and Country Recycling Facility	Collin	5TS	45,251
4	12	City of Garland Transfer Station	Dallas	5TS	118,534
4	60	City of Dallas Transfer Station - Fair Oaks Ave	Dallas	5TS	69,909
4	227	City of University Park Transfer Station	Dallas	5TS	12,751
4	1145	City of Dallas Transfer Station - Harry Hines Blvd	Dallas	5TS	152,782
4	1263	City of Mesquite Transfer Station	Dallas	5TS	55,107
4	1421	PSC Recovery Systems Liquid Waste Processing Facility	Dallas	5GG	63,031
4	1453	City of Dallas Transfer Station - Westmoreland Rd	Dallas	5TS	62,911
4	2069A	Liquid Environmental Solutions of Texas Dallas Facility	Dallas	5GG	137,273
4	40196	Community Waste Disposal Transfer Station	Dallas	5TS	64,823
4	40265	Stericycle Garland Facility	Dallas	5AC	24,828
4	40080	Harrington Environmental Liquid Transfer Station	Johnson	5TL	6,400
4	40168	Cleburne Transfer Station	Johnson	5TS	65,963
4	40181	Somervell County Transfer Station	Somervell	5TS	1,773
4	1225D	Cold Springs Liquid Waste Processing Facility	Tarrant	5GG	63,048
4	2256A	Southwaste Disposal Dallas Facility	Tarrant	5GG	97,781
4	2275	North Texas Recycling Complex (facility reported all incoming materials as diverted and no waste transferred for disposal)	Tarrant	5TS	0
4	2306	IESI Minnis Drive Transfer Station	Tarrant	5TS	142,795
4	2379	Liquitek Arlington Liquid Waste Processing Facility	Tarrant	5GG	47,413
4	40052	Southwest Paper Stock Transfer Station	Tarrant	5TS	12,920
4	40186	Westside Transfer Station	Tarrant	5TS	183,814
4	40241	Oncore Technology Facility	Tarrant	5MW	1,376

Approximately 623,000 tons of waste is processed at one of 6 Western Area Region Transfer Stations

Transfer Station Costs & Benefits

Major cost consideration is the construction and operation of the transfer station.



Regionalization is not new



Household Hazardous Waste

Chemicals, detergents, petroleum products, pesticides, herbicides, and fertilizers are stormwater pollutants. Stormwater runoff enters storm drains during rain and discharges directly into the nearest body of water without any treatment to remove pollutants. This is unlike the sinks and toilets in your home that drain to a water reclamation plant for treatment. Responsible use and recycling of these wastes helps protect the quality of water sources for drinking and recreation.



The City of Fort Worth's award-winning regional collection programs help citizens of Fort Worth and participating cities dispose of household hazardous waste in a safe, responsible, no-hassle manner.

Environmental Collection Center



IV. Regional Collaboration

Pros	Cons
Efficiencies in facility development & operations	Loss of control
Reduced environmental impacts	Distances required to get to facilities
Increased available capital for projects	Public acceptance
Sufficient waste flow – economies of scale	
Greater flexibility	
Public Acceptance	

Key Issues

Organizational / Internal

- Purpose
- Membership / Representation
- Decision Making Process
- Funding
- Accountability

Project Related

- Waste Flow Control
- Status of Current Waste Contracts
- Permitting / Permit Holder
- Financial Assurance
- Market Risks

Regional Opportunities

- Collective Contracting for recycling programs
- CTRA Model for cooperative actions
- Organics management
- Sludge management for small communities
- Joint Collection Contracts
- Cooperative Transfer Stations
- Regional Landfill

Complexity of the Projects and Goals of the Region will dictate the Complexity of the Organizational Structure

Planning Organization



Internal

Purpose:

- *Educate, advocate and develop regional sustainable policies and programs*

Membership:

- *Volunteers (planners, engineers, architects, elected officials)*
- *Executive Committee*
- *Board of Directors*
- *Board Membership*
- *Topic Specific Task Forces*

Decision Making Process:

- *Generally task force driven process*

Funding:

- *Primarily from membership dues and education event fees*
- *Annual budget of approximately \$125,000*

Accountability:

- *It is a volunteer organization – primary accountability lies with members*

GDPC Examples



Events & Activities

- Annual planning retreat
- Monthly breakfast meetings with leaders in various fields presenting to Board
- Annual luncheon with Key Note Speaker
- Annual recognition “Urban Design Awards” for sustainable designs
- Policy statements & resolutions
- Press releases on GDPC actions



Planning Organization – Best Southwest Partners



Purpose:

- *Economic development, educate, advocate, and develop regional growth and cooperative actions*

Membership:

- *12 City partners and 18 other partners that include hospitals, colleges and universities, banks, utilities and other businesses, all Interested in improving the quality of life in this region, thereby promoting economic development*

Decision Making Process:

- *Committees include education, tourism, transportation, health care, work force development, marketing, brand development, and legislative*

Funding:

- *Primarily from membership dues and education event fees*
- *Annual budget unknown*

Accountability:

- *It is a volunteer organization*

Key Issues

- Purpose
- Controls
- Who pays
- Representation
- Legal authority
- Major benefits
- Key risks
- Waste flow control
- Role of private sector
- Status of current contracts
- Audits & Performance

Thanks

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