

# Proposed West DuPage Recycling and Transfer Station West Chicago, Illinois

## Criteria 1 - Facility Need Assessment Review

*"the facility is necessary to accommodate the waste needs of the area it is intended to serve (415 ILCS 5/39.2).*

*Prepared for:*  
**Protect West Chicago**

**January 2023**

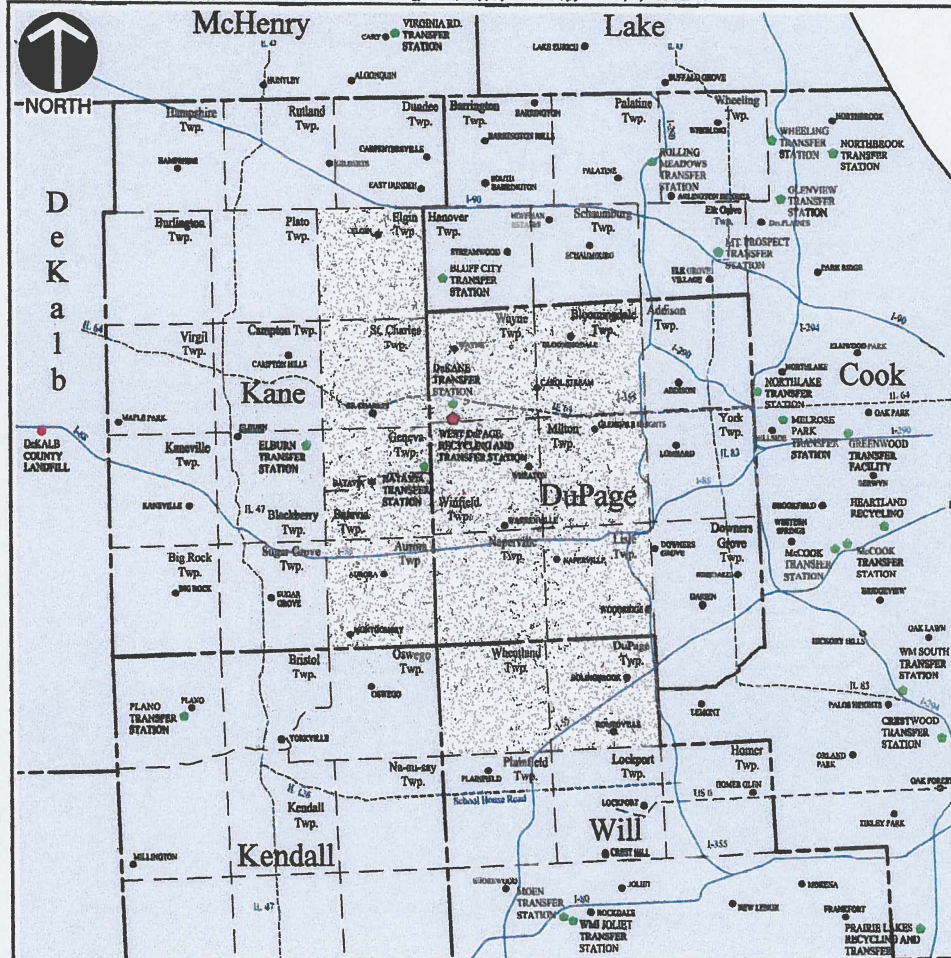
## ***John Lardner, PE***

- Professional *Engineer* with over 35 years of experience in the solid waste field
- Registered Professional Engineer in Illinois and Indiana
- B.S. Civil Engineering, Michigan State University,
- M.S. Civil Engineering, University of Illinois
- Prepared need assessment studies and testimony for nine waste related facilities in Illinois, four of which were transfer stations
- Design engineer for over 22 solid waste projects in Illinois and Indiana
- Professional Associations
  - Solid Waste Association of North America, past Illinois Chapter President
  - U.S. Composting Council
  - American Society of Civil Engineers
  - Illinois Recycling Association – current board member
  - Illinois Food Scrap and Composting Coalition – current board member

# OVERVIEW

- Review of West DuPage RTS Service Area
- Review of Waste Quantity Disposed in Service Area
- Current Transfer Stations Service Area Overlap
- Waste Transfer Capacity Available to Service Area





**REFERENCE**

1. LOCATIONS OF TRANSFER STATIONS BASED ON ADDRESSES FROM 2009 ILLINOIS SOLID WASTE CAPACITY REPORTS OR OTHER PUBLICLY AVAILABLE INFORMATION.
2. OWNER/OPERATORS OF TRANSFER STATIONS TAKEN FROM COMPANY WEBSITES AND OTHER PUBLICLY AVAILABLE INFORMATION.

**LEGEND**

- WEST DUPAGE RECYCLING AND TRANSFER STATION
- SURROUNDING TRANSFER STATION
- SURROUNDING LANDFILL
- SURROUNDING MUNICIPALITY
- WEST DUPAGE RECYCLING AND TRANSFER STATION SERVICE AREA

From Figure 1-1 of Siting application prepared by Civil and Environmental Consultants, Inc.

1/5/2023

**Townships**

DuPage County	Kane County	Will County
Bloomington	Aurora	DuPage
Milton	Batavia	Wheatland
Lisle	Elgin	
Naperville	Geneva	
Wayne	St. Charles	
Winfield		



## Population of Service Area Counties

DuPage County      566,180

Kane County      345,083

Will County      176,242

**Total**      **1,087,505**

*Ref. US Census Bureau 2020*

## Waste Generation

DuPage County	8.77 pounds per person per day
Kane County	8.21 pounds per person per day
Will County	7.56 pounds per person per day

## Recycling Rate (%)

DuPage County	30%
Kane County	37%
Will County	43%



## Waste Disposal Calculation

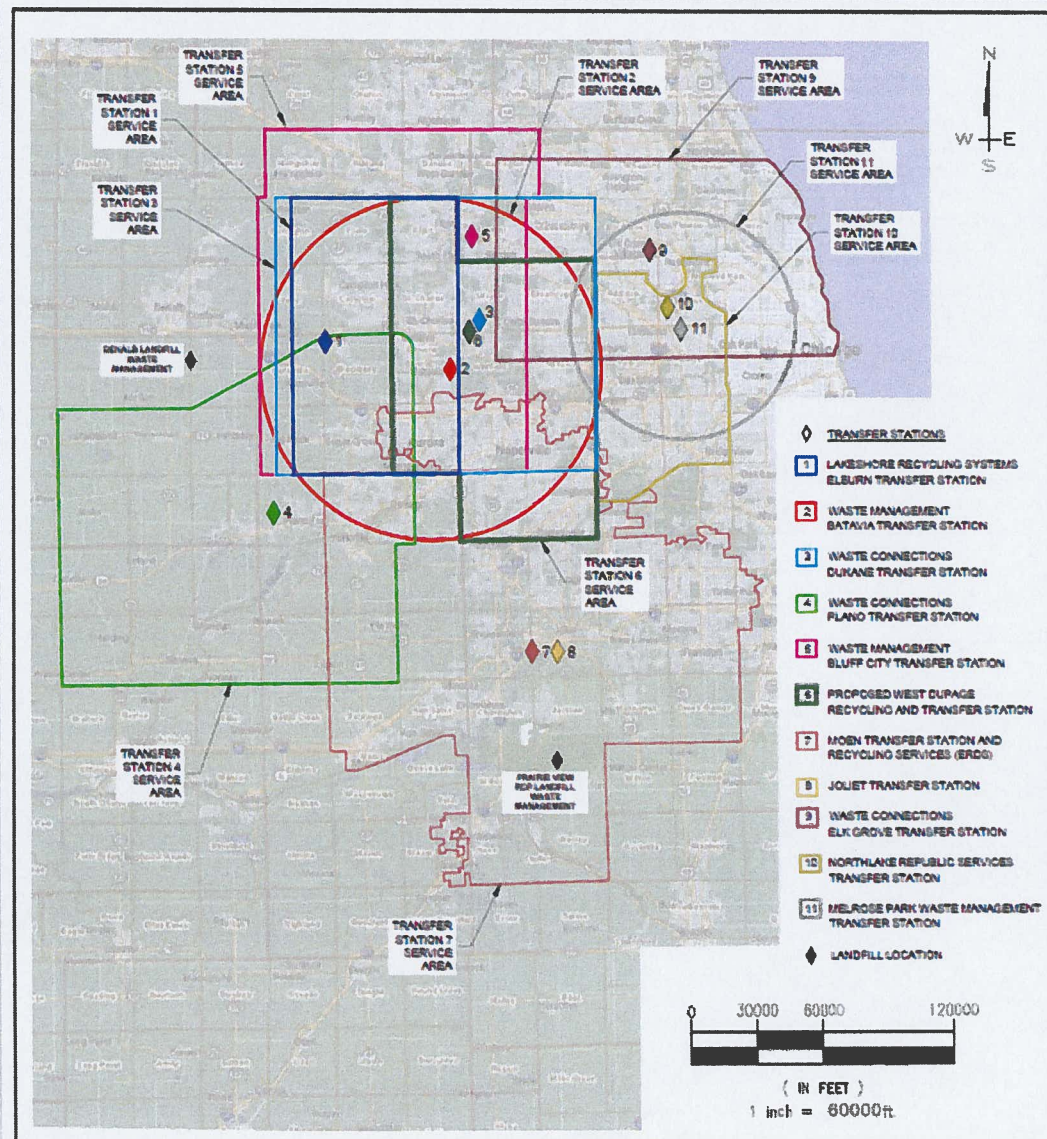
# people x # lbs/pp/day – recycled x 365 days  
÷ 2,000 lbs. per ton = tons/year

Waste Generated for Disposal in WDRTS  
Service Area is 2,997 tons/year

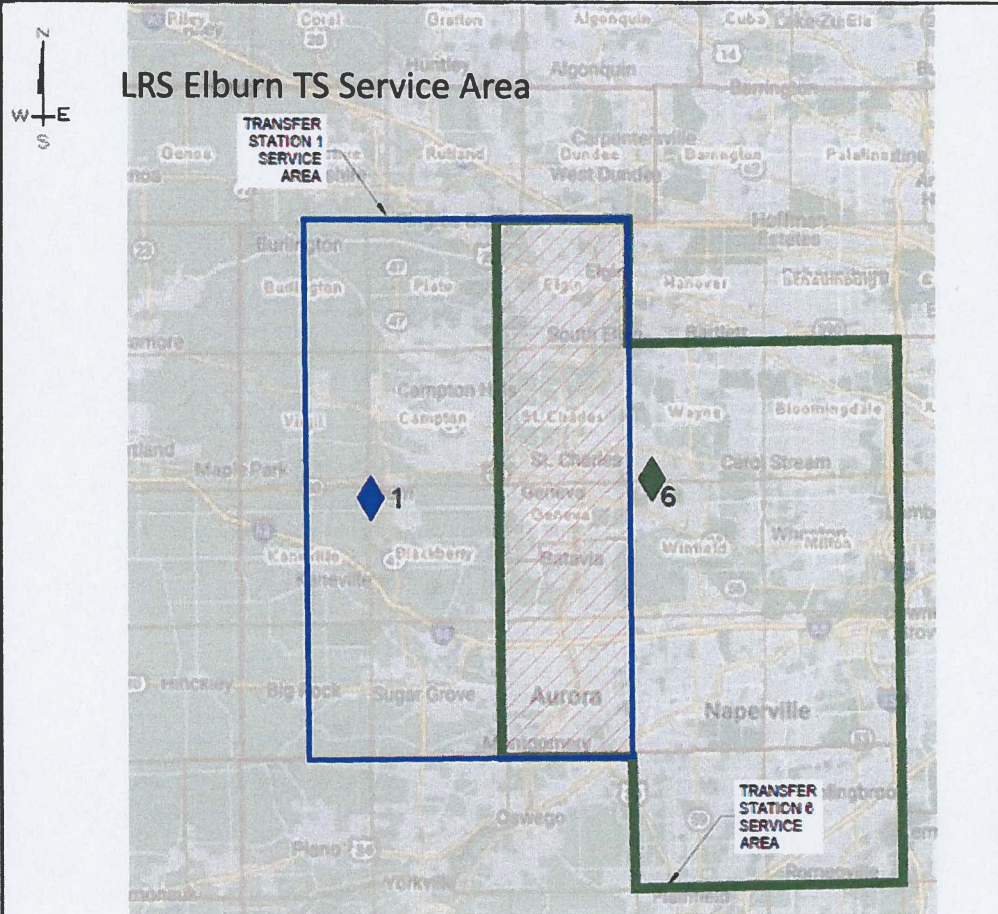
Waste generated per 6 days work week in WDRTS  
Service Area = 3,547 tons/year



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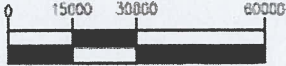
**LRS Elburn TS Service Area**

TRANSFER STATION 1 SERVICE AREA

TRANSFER STATION 6 SERVICE AREA

- ◆ TRANSFER STATIONS
- 1 LAKESHORE RECYCLING SYSTEMS ELBURN TRANSFER STATION
- 6 PROPOSED WEST DUPAGE RECYCLING AND TRANSFER STATION

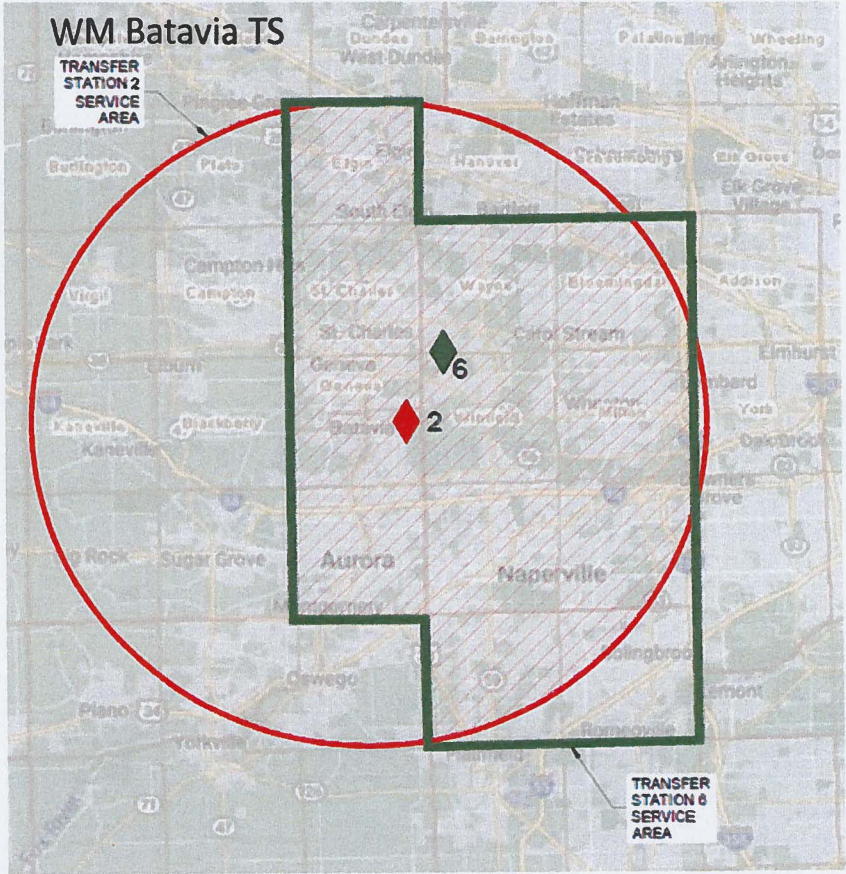
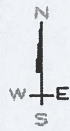
OVERLAP BETWEEN TRANSFER STATION SERVICE AREAS 1 & 6 = 137 SQUARE MILES (APPROX)







( IN FEET )  
1 inch = 30000ft.

1/5/2023





-  **TRANSFER STATIONS**
-  **WASTE MANAGEMENT  
BATAVIA TRANSFER STATION**
-  **PROPOSED WEST DUPAGE  
RECYCLING AND TRANSFER STATION**
-  **OVERLAP BETWEEN TRANSFER  
STATION SERVICE AREAS 2 & 6 =  
374 SQUARE MILES (APPROX)**

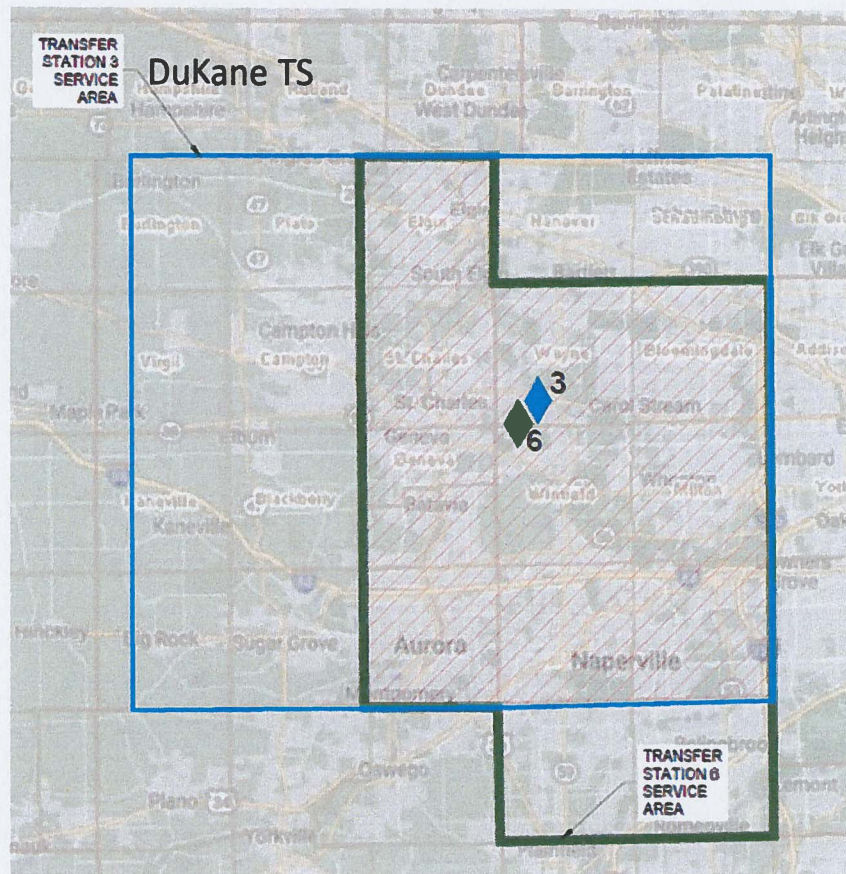
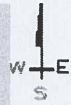





( IN FEET )  
1 inch = 30000ft.


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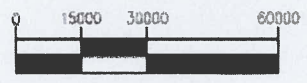
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-  TRANSFER STATIONS
-  WASTE CONNECTIONS  
DUKANE TRANSFER STATION
-  PROPOSED WEST DUPAGE  
RECYCLING AND TRANSFER STATION

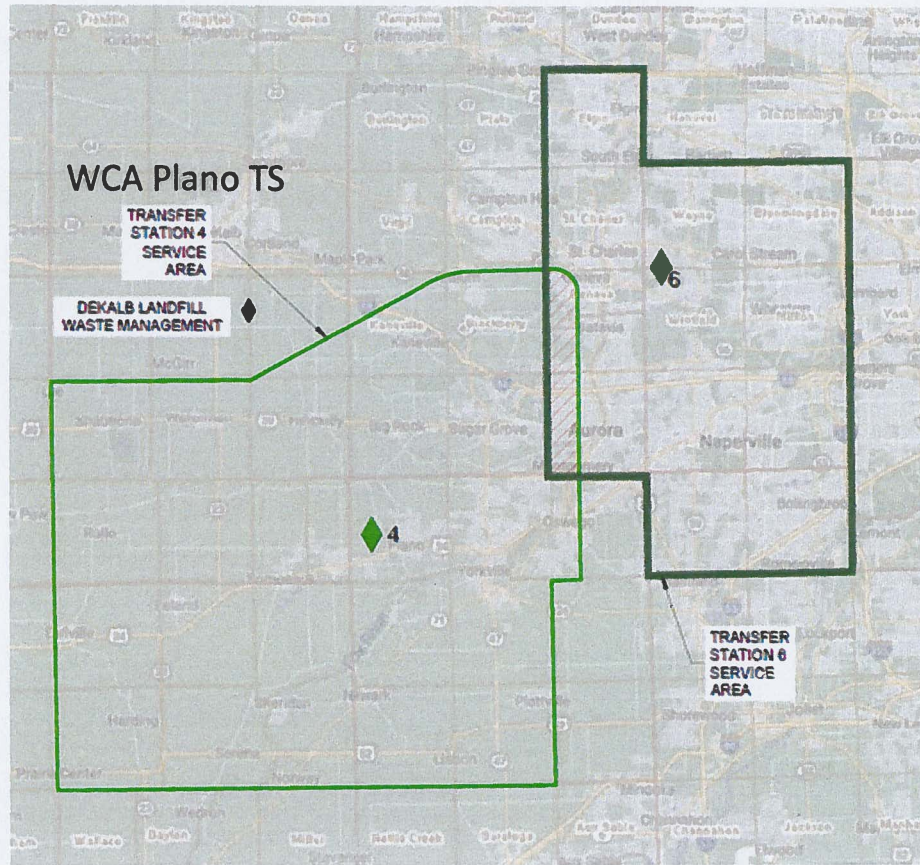
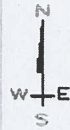
 OVERLAP BETWEEN TRANSFER  
STATION SERVICE AREAS 3 & 6 =  
332 SQUARE MILES (APPROX)



( IN FEET )  
1 inch = 30000ft.

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- ◇ **TRANSFER STATIONS**
- 4 **WASTE CONNECTIONS  
PLANO TRANSFER STATION**
- 6 **PROPOSED WEST DUPAGE  
RECYCLING AND TRANSFER STATION**
- ◆ **LANDFILL LOCATION**

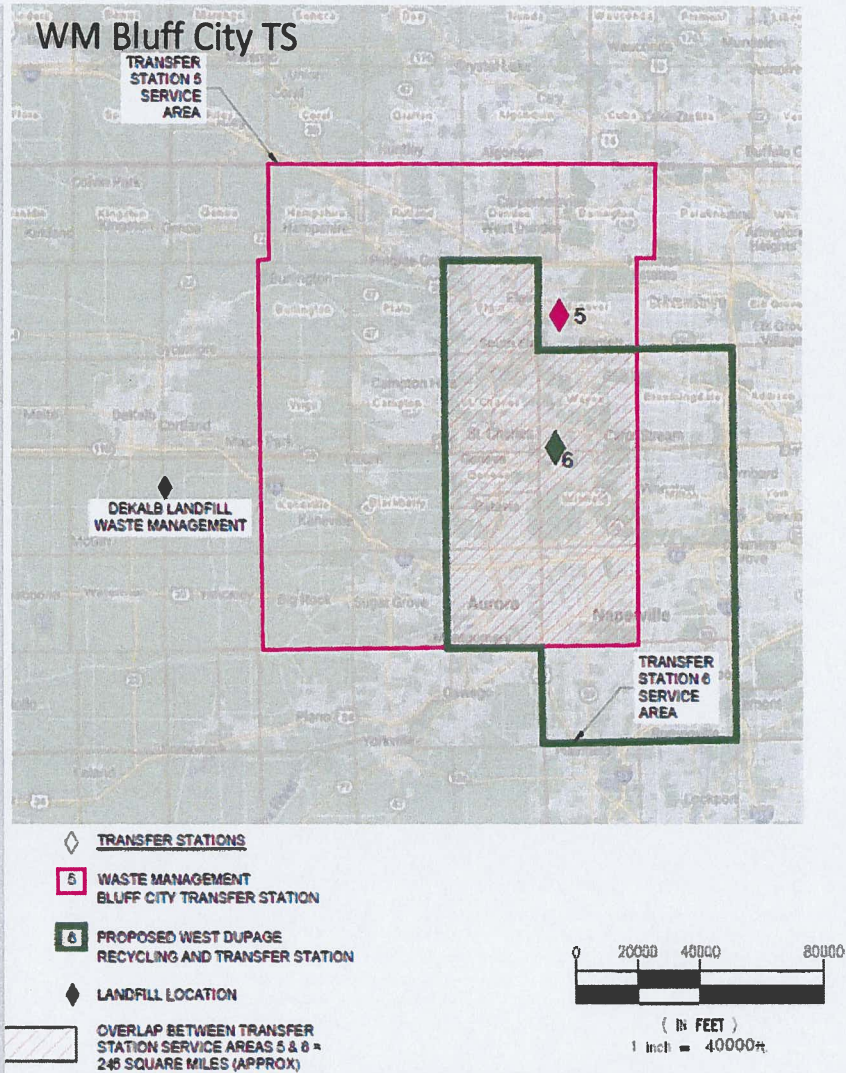
OVERLAP BETWEEN TRANSFER  
STATION SERVICE AREAS 4 & 6 =  
22 SQUARE MILES (APPROX)



( IN FEET )  
1 inch = 40000ft.

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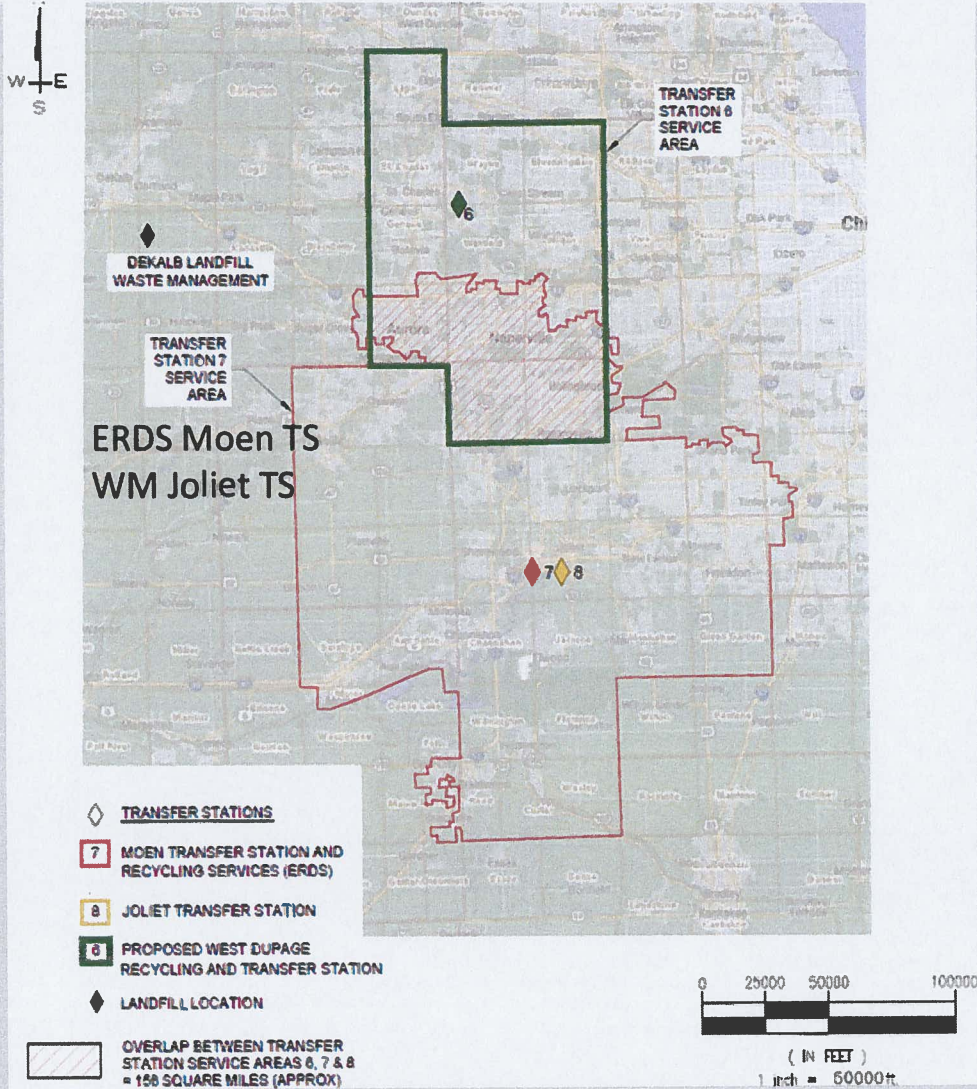


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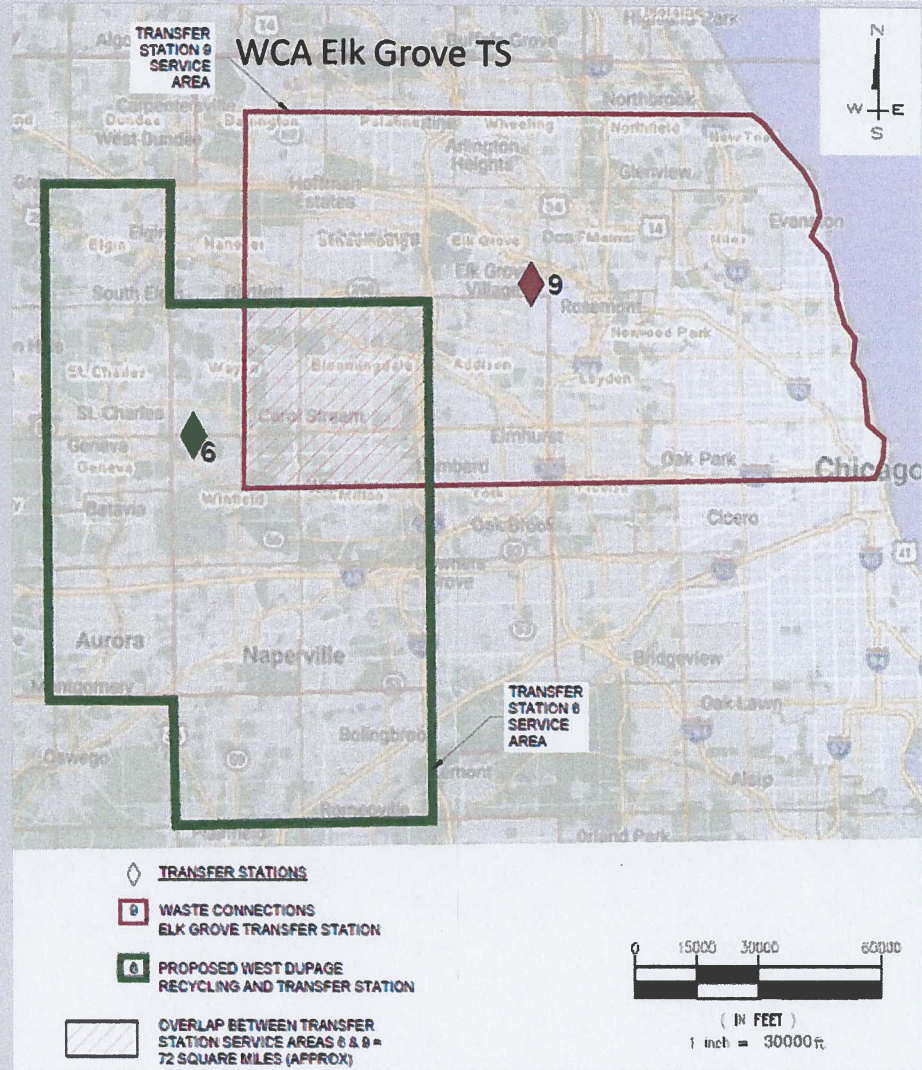




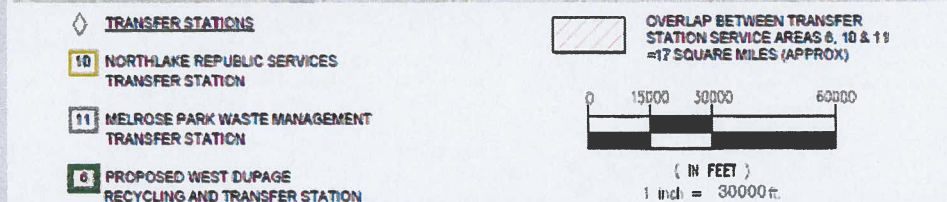
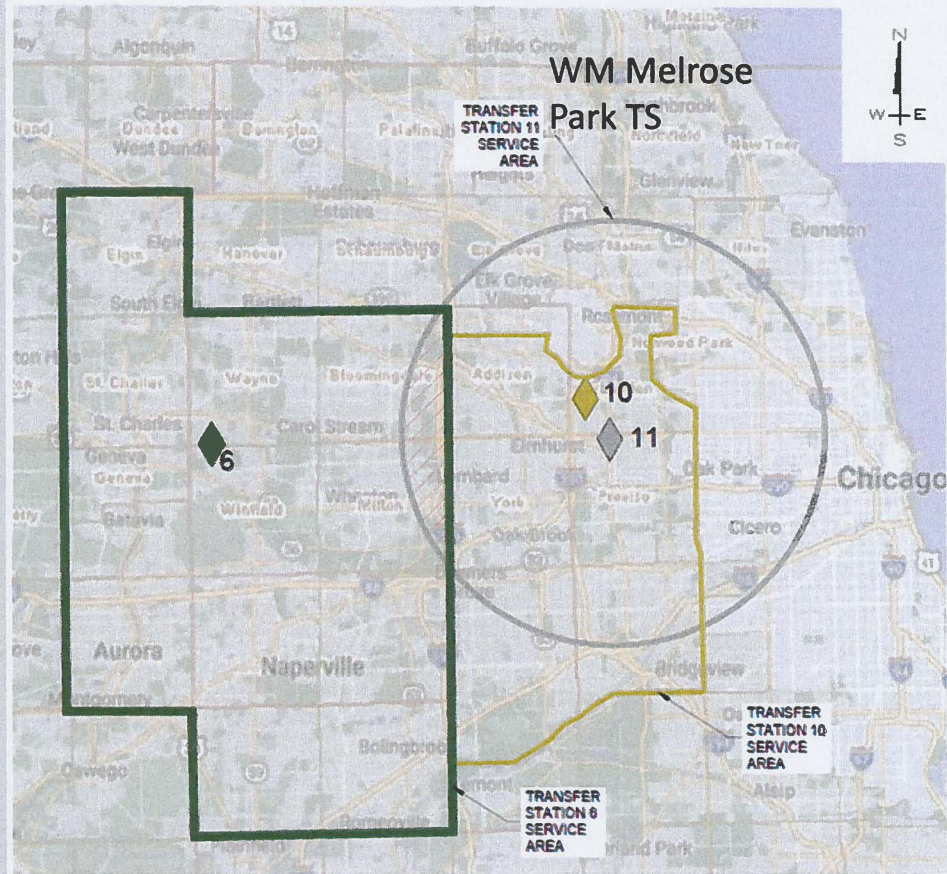
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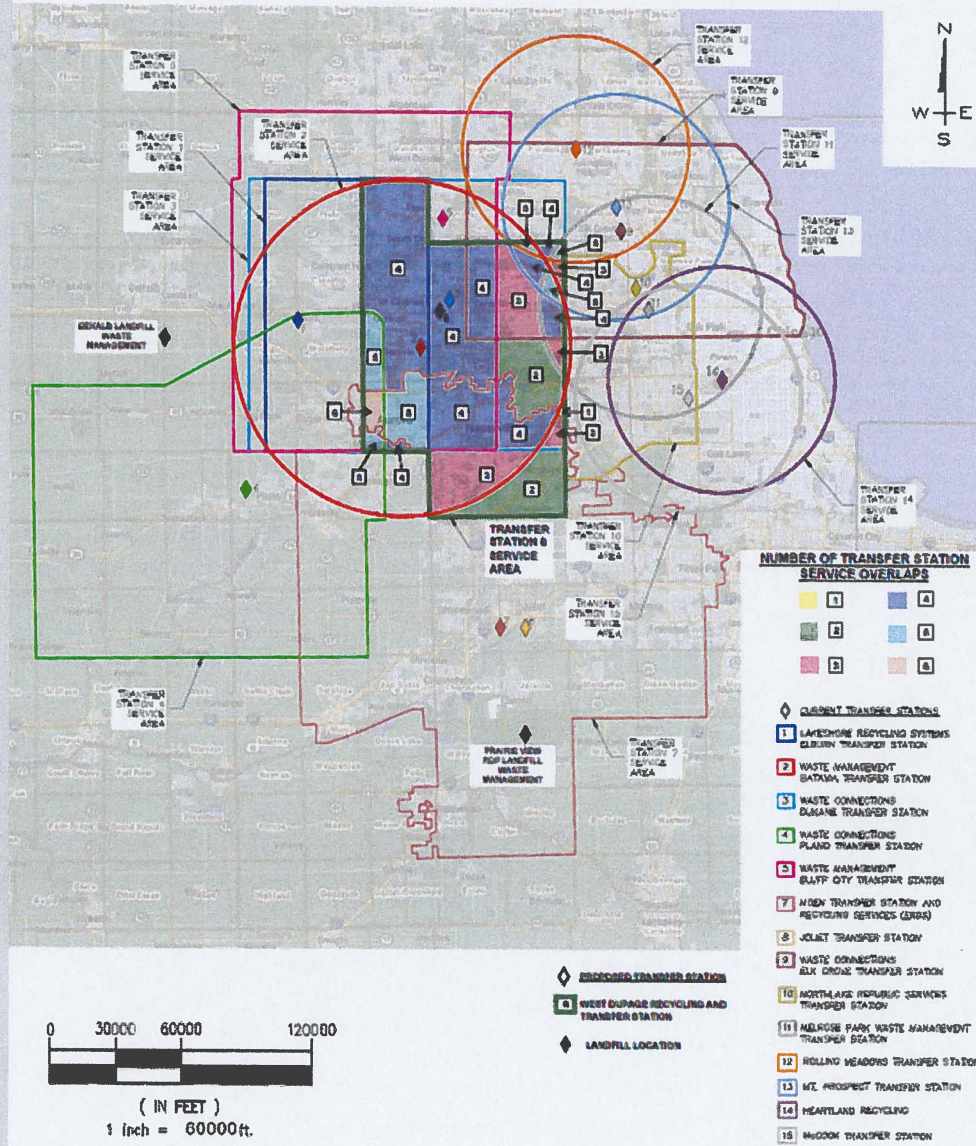


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Transfer Station/ Location	Total Capacity (Tons per Day)	2020 Service Area Population	2020 Service Area Overlap Population	Percent	2022 Available Capacity (Tons per Day)
Waste Management Bluff City Elgin, IL	2,000	845,947	560,111	66%	1320
Waste Connections Plano, IL	650	648,033	55,765	9%	59
Du Kane Transfer West Chicago, IL	3,000	984,311	911,263	93%	2790
Waste Management Transfer, Batavia, IL	1,500	1,134,573	635,369	56%	840
Lakeshore Recycling Systems Transfer, Elburn, IL	1,000	409,636	345,083	84%	840
Waste Management Transfer, Joliet, IL	1,300	1,181,254	348,416	37%	481
ERDS Transfer, Joliet, IL	1,080	1,181,254	348,416	37%	400
Waste Connections Transfer Elk Grove Village, IL	1,000	2,199,031	215,685	10%	100
Republic Services Transfer Melrose Park, IL	5,500	1,455,875	132,866	9%	495
LRS GCDD Recycling West Chicago, IL (Note 1)	1,250	N/A	N/A	40%	500
Falcon Green Resources GCDD Recycling, West Chicago, IL (Note 2)	300	N/A	N/A	40%	120
<b>Total</b>					<b>7,944</b>

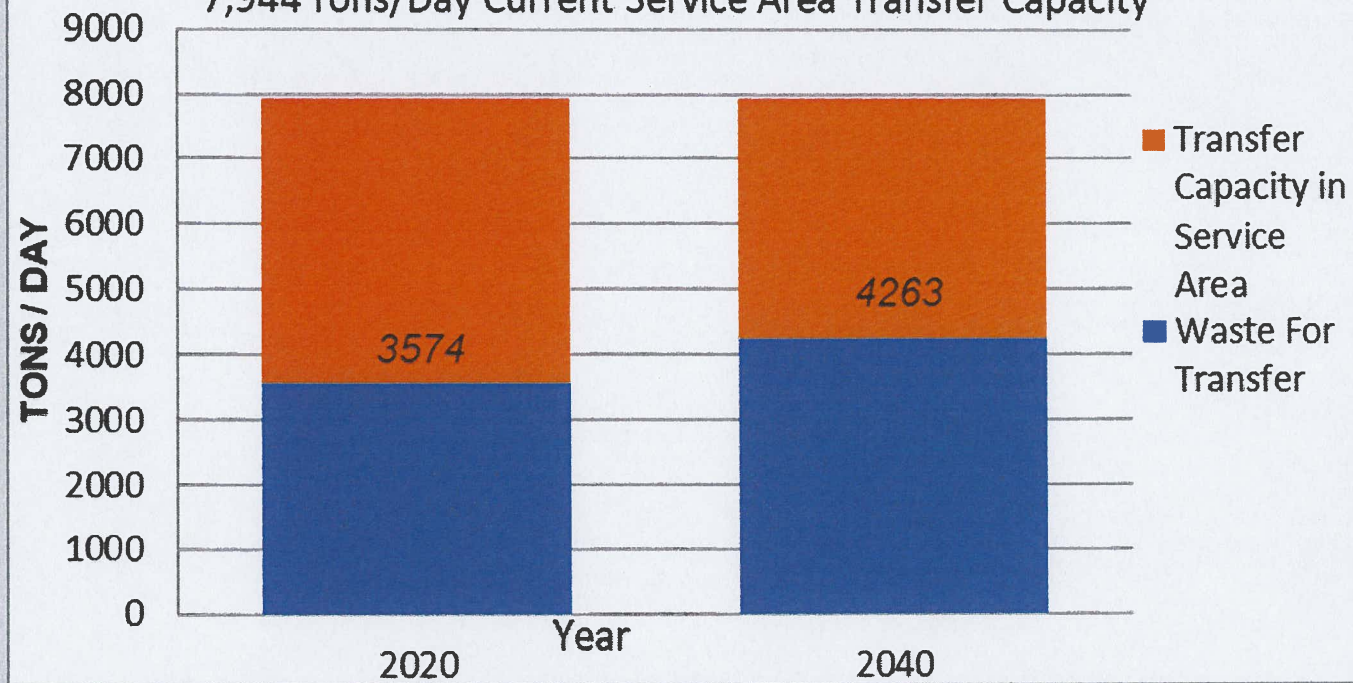
Note 1: 40% of 1,250 tons per day incoming General Construction and Demolition Debris  
Debris (GCDD) can be disposed of as waste

Note 2: 40% of 300 tons per day incoming CCDD can be disposed of as waste

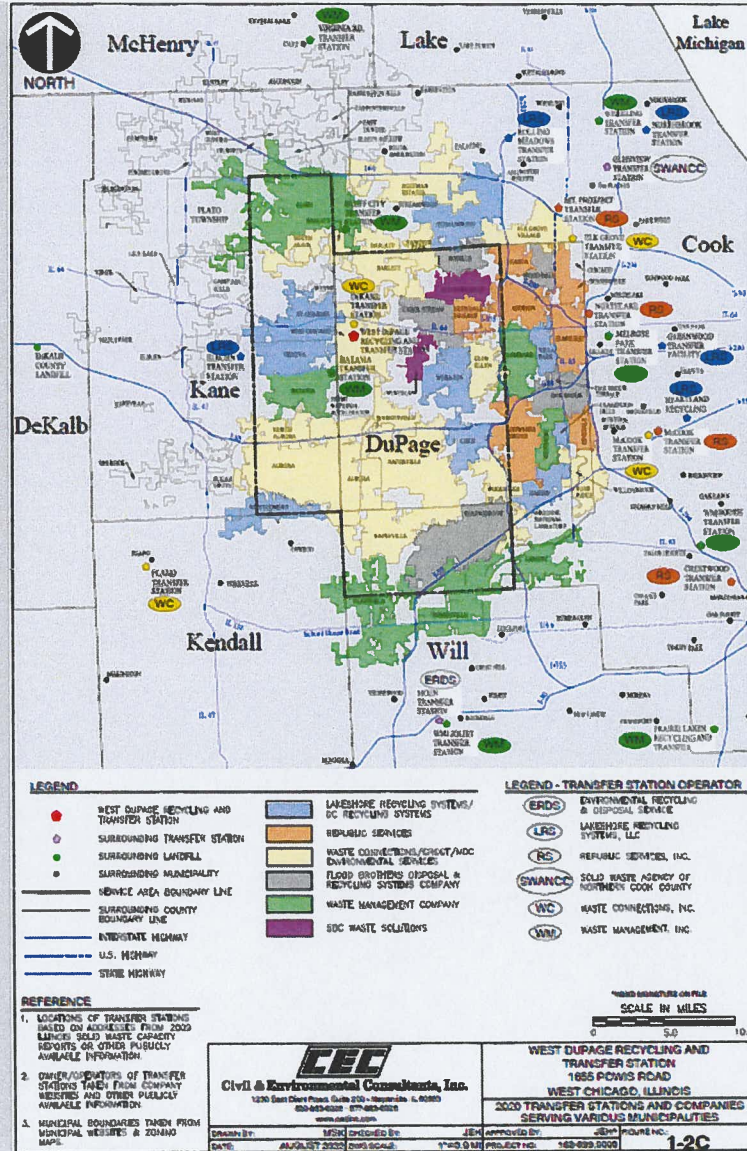


**FIGURE 1 - PROJECTED SERVICE AREA WASTE FOR TRANSFER**

7,944 Tons/Day Current Service Area Transfer Capacity







1/5/2023



## Conclusion

Based on the information presented in this review, additional MSW waste transfer capacity is not necessary to serve the waste needs of the intended service area of the LRS West DuPage RTS transfer station. This conclusion is supported by the following facts:

- The LRS West DuPage RTS service area currently generates 2,977 tons per day of waste that requires transfer to landfills for disposal. This translates to 3,574 tons per operating day of the week. Present capacity in the service area for transfer of waste is 7,944 tons per day, representing a surplus in capacity of 4,370 tons per operating day, or a 122% surplus.
- Expected growth in population through Year 2040 is insufficient to create a need for additional waste transfer capacity in the service area because there will remain an 86% surplus of waste transfer capacity in year 2040
- Two waste transfer stations are located within the service area of the proposed LRS West DuPage RTS location and seven transfer stations have service areas spaced geographically in proximity to provide service within the proposed LRS service area. One of the nine is operated by LRS and it currently overlaps 84% of the population of the service West DuPage RTS service area.
- As illustrated on Figure 11 of this report, there is currently a minimum of two (2) transfer stations available to serve the proposed service area of the West DuPage RTS facility, and as many as six (6). Market conditions of waste volume, transfer capacity and travel distance do not necessitate a new waste transfer station in West Chicago to meet need in the service area.