Resource Conservation Council Meeting

Thursday, February 13, 2020

Cassidy Campbell

CCampbell@nctcog.org
1. Welcome and Introductions

2. Notification of Conflicts of Interest
3. **Meeting Summary.** The October 30, 2019 meeting summary will be presented for approval.
4. **FY2020-2021 Materials Management Call for Projects.** Kathy Fonville, City of Mesquite and chair of the Grant Selection Subcommittee, will present the subcommittee’s funding recommendations for the FY2020-2021 Call for Projects. A motion to recommend to the NCTCOG Executive Board will be sought.
## FY 2020-2021 Materials Management Call for Projects

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Applications Received</td>
<td>36</td>
</tr>
<tr>
<td>Total Requested Funding Amount</td>
<td>$3,338,380.17</td>
</tr>
<tr>
<td>Projects Recommended for Funding</td>
<td>16</td>
</tr>
<tr>
<td>Total Recommended Amount for Funding</td>
<td>$1,141,698.80</td>
</tr>
<tr>
<td>Total Projects Recommended for Partial Funding</td>
<td>2</td>
</tr>
<tr>
<td>Rank</td>
<td>Entity</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>1</td>
<td>City of Garland</td>
</tr>
<tr>
<td>2</td>
<td>City of Frisco</td>
</tr>
<tr>
<td>3</td>
<td>City of Plano</td>
</tr>
<tr>
<td>4</td>
<td>Hood County</td>
</tr>
<tr>
<td>5</td>
<td>City of Dallas</td>
</tr>
<tr>
<td>6</td>
<td>City of Mesquite</td>
</tr>
<tr>
<td>7</td>
<td>City of Mansfield</td>
</tr>
<tr>
<td>8</td>
<td>City of Fort Worth</td>
</tr>
<tr>
<td>Rank</td>
<td>Entity</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>9</td>
<td>City of Princeton</td>
</tr>
<tr>
<td>10</td>
<td>City of Heath</td>
</tr>
<tr>
<td>11</td>
<td>City of Rowlett</td>
</tr>
<tr>
<td>12</td>
<td>City of Lewisville</td>
</tr>
<tr>
<td>13</td>
<td>City of Southlake</td>
</tr>
<tr>
<td>14</td>
<td>City of Fort Worth</td>
</tr>
<tr>
<td>15</td>
<td>City of Euless</td>
</tr>
<tr>
<td>16</td>
<td>City of Burleson</td>
</tr>
</tbody>
</table>
5. **Re-TRAC Connect Contract.** NCTCOG will present the Regional Management Plan Subcommittee’s informal recommendation regarding whether to continue the Re-TRAC Connect contract with Emerge Knowledge, and if so, which option.
6. **Second Waste Characterization Assessment Results.** Burns and McDonnell, Inc. will present the results of the November 2019 waste characterization assessment conducted in association with the Regional Recycling Survey and Educational Campaign.

7. **Weatherford Technical Study.** Burns and McDonnell, Inc. will provide a presentation covering the City of Weatherford’s Solid Waste Technical Study performed during the FY2018-2019 biennium.
Waste and Recycling Characterization Results

February 13, 2020

Resource Conservation Council

Scott Pasternak
Study methodology changes between 2018 and 2019

- Two cities unable to participate in 2019
- Included hand-sorting of recycling in 2019
- Added e-commerce OCC, pizza boxes, and polypropylene (#5 plastic) categories to provide additional perspective

### Waste Characterization Study Methodologies

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating Cities</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Trash Samples</td>
<td>50</td>
<td>49</td>
</tr>
<tr>
<td>Recycling Samples</td>
<td>None; used MRF audit data</td>
<td>44</td>
</tr>
<tr>
<td>Material Categories</td>
<td>31</td>
<td>34</td>
</tr>
</tbody>
</table>
Participating Cities Involvement

<table>
<thead>
<tr>
<th>Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas</td>
</tr>
<tr>
<td>Fort Worth</td>
</tr>
<tr>
<td>Arlington</td>
</tr>
<tr>
<td>Garland</td>
</tr>
<tr>
<td>Grand Prairie</td>
</tr>
<tr>
<td>Irving*</td>
</tr>
<tr>
<td>Frisco</td>
</tr>
<tr>
<td>Mesquite</td>
</tr>
<tr>
<td>Allen*</td>
</tr>
<tr>
<td>Weatherford</td>
</tr>
</tbody>
</table>

- Collected samples and tracked pickups
- Transported and delivered samples
- Represented a range of solid waste collection programs varying by
  - Size of program
  - Set out type (e.g. cart, bags)
  - Collection frequency (e.g. weekly, every other week)

*unavailable to participate in 2019 sorting event
Waste Delivery
Hand-Sorting Material
Fines Screens
Weight Data Collection
Sorting Bins From Participating Cities
Waste and Recycling Characterization Data Analysis

- Regional analysis replicated 2018 study plus hand-sorted recycling to provide
  - Waste and recycling composition
  - Contamination rate
  - Capture rate
  - Value of material disposed

- Hand-sorting recycling allowed additional analysis on participating cities including
  - Individual waste and recycling composition
  - Participating cities’ capture rate
## Data Analysis Limitations

### Year over Year Comparison
- 2018 recycling data based on MRF audits
- 2019 recycling data based on hand-sort
- Cannot directly compare region-wide and participating cities capture rates

### Extrapolating Data
- Individual city composition / capture rate cannot be extrapolated due to small sample size
- Hand-sorted recycling contamination higher than MRF audits

### Effectiveness of Regional Campaign
- Behavior change requires sustained campaign
- Individual cities adopting campaign critical
- Behavior change occurs at the source of recycling
2019 Regional Garbage Composition

Organics 50%
Plastic 16%
Paper 19%
Metal 3%
Glass 5%
Other 4%
Problem Materials 2%
C&D 1%

Note: see handout for detailed waste composition profile
2019 Regional Recycling Composition

Regional contamination rate estimated at 24%. Included material categories

- Non-recyclable OCC
- Other non-recyclable paper
- Non-recyclable plastic*
- Non-recyclable glass
- Organics*
- C&D
- Problem material
- Fines and other organics

*higher percentage than typical MRF audit due to material category differences and handling

Note: see handout for detailed waste composition profile
Overall Capture Rates

<table>
<thead>
<tr>
<th>Capture Rate Methodology</th>
<th>Recycling</th>
<th>Garbage</th>
<th>Capture Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating Cities</td>
<td>3,526 lbs.</td>
<td>1,604 lbs.</td>
<td>69%</td>
</tr>
<tr>
<td>Regional</td>
<td>411,223 tons</td>
<td>967,176 tons</td>
<td>30%</td>
</tr>
</tbody>
</table>

- Weight of recyclables in recycling and garbage streams used to calculate overall capture rate
  - Participating cities capture rate sums material segregated during sorting event
  - Regional capture rate extrapolates garbage and recycling composition profiles across all material disposed/processed in North Central Texas

- Following slides present capture rate by material category for each methodology
### 2019 Participating Cities Capture Rate

<table>
<thead>
<tr>
<th>Recyclable Material</th>
<th>2019 Participating Cities Capture Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recyclable OCC</td>
<td>86%</td>
</tr>
<tr>
<td>Mixed Paper</td>
<td>65%</td>
</tr>
<tr>
<td>PET Containers</td>
<td>56%</td>
</tr>
<tr>
<td>HDPE Containers - Natural</td>
<td>65%</td>
</tr>
<tr>
<td>HDPE Containers - Colored</td>
<td>61%</td>
</tr>
<tr>
<td>#3-#7 Containers</td>
<td>35%</td>
</tr>
<tr>
<td>Aluminum Used Beverage Containers</td>
<td>63%</td>
</tr>
<tr>
<td>Ferrous Metal Food Containers</td>
<td>44%</td>
</tr>
<tr>
<td>Recyclable Glass</td>
<td>68%</td>
</tr>
</tbody>
</table>

Note: figures calculated by compiling total weight of material segregated at the sorting event – *does not represent region-wide capture rate*
# Regional Capture Rate Comparison

<table>
<thead>
<tr>
<th>Recyclable Material</th>
<th>2018 Regional Capture Rate</th>
<th>2019 Regional Capture Rate</th>
<th>Year-over-Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recyclable OCC</td>
<td>60%</td>
<td>59%</td>
<td>-1%</td>
</tr>
<tr>
<td>Mixed Paper</td>
<td>41%</td>
<td>34%</td>
<td>-7%</td>
</tr>
<tr>
<td>PET Containers</td>
<td>22%</td>
<td>25%</td>
<td>3%</td>
</tr>
<tr>
<td>HDPE Containers - Natural</td>
<td>28%</td>
<td>28%</td>
<td>0%</td>
</tr>
<tr>
<td>HDPE Containers - Colored</td>
<td>30%</td>
<td>26%</td>
<td>-4%</td>
</tr>
<tr>
<td>#3-#7 Containers</td>
<td>14%</td>
<td>11%</td>
<td>-3%</td>
</tr>
<tr>
<td>Aluminum Used Beverage Containers</td>
<td>19%</td>
<td>26%</td>
<td>7%</td>
</tr>
<tr>
<td>Ferrous Metal Food Containers</td>
<td>18%</td>
<td>14%</td>
<td>-4%</td>
</tr>
<tr>
<td>Recyclable Glass</td>
<td>25%</td>
<td>34%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Note: figures calculated by extrapolating composition for garbage and recycling over total disposed and processed in region. Different analysis than sample-based capture rate.
Conclusions

Regional composition indicates

- High levels of e-commerce packaging and clean pizza boxes in refuse stream
- #5 polypropylene (clamshell containers) significant portion of #3-#7 plastic
- High volume of organics present in refuse (50%) and recycling (10.5%)

Regional capture rate comparison shows

- Improved capture of PET and aluminum between 2019 and 2019
- Increase focus on capture of HDPE and steel cans
- Hand-sorting recyclables provides more granular capture rate analysis

Continued regional campaign and integration of content into individual city outreach will provide

- Improved capture rates of key materials over time
- Decreased contamination rates entering MRFs
Questions?

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ebweiss@burnsmcd.com
Regional Waste Minimization Evaluation

► Project Background

• The City of Weatherford, nearby communities, Parker County, and regional entities face current and future factors and challenges that will impact solid waste management:
  ➤ Significant projected local and regional growth
  ➤ Anticipated increases in material generation quantities
  ➤ Limited regional landfill capacity
  ➤ Increasing costs of disposal

► Project Purpose

• Evaluate interest in and feasibility of future regional options to increase waste minimization, recycling, and diversion, focused within Parker County
## Regional Cities & Community Stakeholders

### Cities
- Weatherford
- Aledo
- Annetta
- Annetta North
- Annetta South
- Hudson Oaks
- Springtown
- Willow Park

### Community Stakeholders
- Weatherford ISD
- Aledo ISD
- Weatherford College
- Weatherford Downtown Business Alliance
- Medical City Weatherford
- Walsh (neighborhood)
Content of Evaluation Report

Section 1
Executive Summary

Section 2
Overview of Regional Characteristics

Section 3
Summary of Current Programs and Services

Section 4
Stakeholder Workshop Summary

Section 5
Regional Options

Section 6
Implementation Plan
Overview of Regional Characteristics

Demographics

Diversion & Disposal

Regional MSW Facilities
Provided an overview of residential and commercial solid waste and recycling services currently provided by and for the following entities

Developed through series of interviews with entities and public information searches
Stakeholder Workshop

- **Intent of Workshop**
  - Bring regional stakeholders together to obtain input regarding potential program options through facilitated discussion

- **Content**
  - Reviewed state of regional solid waste and recycling industry, current programs, and need for enhanced waste minimization, reduction, and diversion efforts
  - Presented regional waste minimization options and gathered feedback from stakeholders regarding interest and priority

- **Outcome**
  - Stakeholder feedback was utilized to further evaluate and prioritize final waste minimization options recommendations (Sections 5 & 6)
Regional Options

- Evaluated multiple strategies

- For each option, the following is presented:
  - Program description
  - Implementation considerations
  - Key findings and recommendations

- Commercial waste reduction & recycling
- Citizens’ Collection Station (CCS)
- Brush and yard trimmings processing
- Household Hazardous Waste (HHW)
- Regional collaboration
## Implementation Plan

<table>
<thead>
<tr>
<th>Strategy Target</th>
<th>Strategy ID</th>
<th>Strategy</th>
<th>Timeline</th>
<th>Estimated Financial Impact</th>
<th>Waste Diversion/Minimization Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Waste Reduction &amp; Recycling</td>
<td>1-1</td>
<td>Develop business recognition program and WRAP</td>
<td>Near-term</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>2-1</td>
<td>Explore expansion of existing collection programs</td>
<td>Mid-term</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>3-1</td>
<td>Develop commercial waste generation study</td>
<td>Mid-term</td>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td>Household Hazardous Waste</td>
<td>3-4</td>
<td>Explore opportunities for intergovernmental collaboration for mobile collection</td>
<td>Near-term</td>
<td>Variable</td>
<td>Moderate/High</td>
</tr>
<tr>
<td></td>
<td>4-4</td>
<td>Explore opportunities for contracted at-your-door service options</td>
<td>Near-term</td>
<td>High</td>
<td>Moderate/High</td>
</tr>
<tr>
<td></td>
<td>5-4</td>
<td>Explore grant funding through NCTCOG</td>
<td>Near-term/Ongoing</td>
<td>Moderate</td>
<td>N/A</td>
</tr>
<tr>
<td>Regional Collaboration</td>
<td>1-5</td>
<td>Continue collaborative contracting</td>
<td>Near-term</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>2-5</td>
<td>Participate in NCTCOG Regional Recycling Survey and Campaign</td>
<td>Near-term</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>3-5</td>
<td>Consider long-term strategic relationships among municipal entities</td>
<td>Long-term</td>
<td>Low</td>
<td>Moderate</td>
</tr>
</tbody>
</table>
Questions?

Scott Pasternak
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512-872-7141
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8. Analysis of *Know What To Throw* Promotional Activities.
NCTCOG will discuss the results of the analysis conducted to determine the most cost-effective promotional activities for the *Know What To Throw* campaign.
DO YOU KNOW WHAT TO THROW?

Cost/Benefit Analysis for Paid Advertising

Brian Geck
North Central Texas Council of Governments
February 13, 2019
Top Website Traffic Sources

- **Paid Search**: 27%
- **Display Ads**: 22%
- **Direct**: 21%
- **Social Media**: 14%
- **Email (ST)**: 8%
- **Organic Search**: 7%
- **Referral**: 1%

*June 1, 2019 through August 31, 2019*
### Cost analysis for traffic to www.TimeToRecycle.com

**June 1 – August 31, 2019**

<table>
<thead>
<tr>
<th>Platform</th>
<th>Spend</th>
<th>Users to TTR</th>
<th>Est. Cost/User</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google Paid Ads</td>
<td>$11,307.41</td>
<td>12,320</td>
<td>$0.13 – $2.45</td>
<td></td>
</tr>
<tr>
<td>Facebook Paid Ads</td>
<td>$766.86</td>
<td>5,782</td>
<td>$0.43 – $10.00</td>
<td></td>
</tr>
<tr>
<td>Twitter Paid Ads</td>
<td>$1,795.38</td>
<td>175</td>
<td>$1.80 – $26.32</td>
<td></td>
</tr>
<tr>
<td>Dallas Morning News Digital</td>
<td>$16,000</td>
<td>8,502</td>
<td>$1.88</td>
<td></td>
</tr>
<tr>
<td>Fort Worth Star-Telegram Digital</td>
<td>$14,000</td>
<td>4,751</td>
<td>$2.95</td>
<td></td>
</tr>
<tr>
<td>All digital Mediums</td>
<td>$43,869</td>
<td>31,530</td>
<td>$1.39</td>
<td></td>
</tr>
<tr>
<td>Dallas Morning News - Print</td>
<td>$24,000</td>
<td>2,801 – 12,695*</td>
<td>$1.89 – $8.57</td>
<td>12,695 is the total number of unaccounted/unknown traffic to the website, this includes all direct traffic and organic source traffic across the whole region. If shown, the smaller number is unaccounted/unknown traffic that is geographically filtered relevant to that medium.</td>
</tr>
<tr>
<td>Fort Worth Star-Telegram - Print</td>
<td>$15,868</td>
<td>2,840 – 12,695*</td>
<td>$1.25 – $5.59</td>
<td></td>
</tr>
<tr>
<td>Community Impact Newsletter (Print)</td>
<td>$15,610</td>
<td>1,719 – 4,343</td>
<td>$3.59 – $9.08</td>
<td></td>
</tr>
<tr>
<td>Movie Theatres</td>
<td>$95,250</td>
<td>5,647 – 12,695*</td>
<td>$7.50 – $16.87</td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td>$33,940</td>
<td>12,695*</td>
<td>$2.67</td>
<td></td>
</tr>
<tr>
<td>Billboards</td>
<td>$95,478</td>
<td>12,695*</td>
<td>$7.52</td>
<td></td>
</tr>
<tr>
<td>DART Bus Wraps/Rail Wraps/Posters</td>
<td>$47,000</td>
<td>2,801 – 12,695*</td>
<td>$3.70 – $16.78</td>
<td></td>
</tr>
<tr>
<td>Fort Worth Bus Wraps/Benches</td>
<td>$21,050</td>
<td>2,840 – 12,695*</td>
<td>$1.66 – $7.41</td>
<td></td>
</tr>
<tr>
<td>All Non-digital Mediums</td>
<td>$348,195</td>
<td>12,695*</td>
<td>$27.43</td>
<td></td>
</tr>
</tbody>
</table>
On January 16th the Recycling Partnership started running Facebook Ads driving traffic to TimeToRecycle.com.
Confused on what to recycle after the holidays? Here is an infographic to help guide you through some tricky items. Learn more at TimeToRecycle.com!

#RecyclingGuide #Infographic #KnowWhatToThrow
Questions?

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Discussion Topics

9. NCTCOG Updates:
   - Tire Disposal Meeting and Next Steps
   - Recycle Roundtable
   - Know What To Throw
   - Request for Proposals
     - Regional Waste Disposal Capacity Study
     - Third Waste Characterization Assessment
   - Illegal Dumping Conference
   - Electronics Recycling Project
   - Regional Solid Waste Management Plan
   - Stormwater Project – Regional Clean-Up Competition
Other Business

10. Future agenda items

11. Roundtable topics
12. Next Meeting Date:

Wednesday, May 20, 2020 at 1:30 p.m.
Metroplex Conference Room
NCTCOG Offices, CPII, First Floor
616 Six Flags Drive, Arlington, TX 76011
Contact

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