

# Landscape Equipment Transition Plan Update

Parks, Trails, & Environment Committee May 6, 2024

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Office of Environmental Quality & Sustainability
City of Dallas

### **Presentation Overview**



- Background/ History
- Implementation progress
- Timeline moving forward



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### **Purpose of Transition**



- Health
- Noise pollution
- Environmental impact
- Meet CECAP Goals to reduce carbon emissions



## Background/History



### • 2022

- Environmental Health Committee recommended phasing out gas-powered landscape equipment.
- EVC provided formal recommendations to ENVS Committee.
- ENVS Chair requested landscape equipment transition plan by June 2023.

#### • 2023

• Council approved \$750,000 for LET to focus on encouraging residents to transition to electric landscaping equipment.



## Background/History



- September 2023-January 2024: Reached out to multiple retail stores about how they partnered with municipalities on incentive programs.
- January 2024 to present:
  - Engaged other cities about their landscape equipment incentive programs.
  - Discussions with 311 about creating an LET application Service Request type and utilizing City Hall On The Go for promotion.
- March 2024: Final draft of LET plan submitted to OEQS.
- April 2024: Briefed EVC on LET plan.
- April 2024 to present: OEQS is drafting the RFP.



### LET Plan recommendations



- Incentive Program Design
- Strategies for Success
- Next Steps







### Program Cost Analysis

There are approximately 220,000 single-family residences in the City of Dallas. 40 Based on the residential survey results, approximately 92% of residents living in single-family homes perform their own lawn care at least some of the time. Using this data, approximately 201,000 homes in Dallas own at least some lawn equipment. Below is an assessment of estimated gas-powered equipment distribution among Dallas residents, recommended rebate amounts, and associated costs.

| Equipment Type            | Percent of<br>Households with | Estimated Quantity<br>to be Replaced | Recommended<br>Rebate Amount | Budget Cost |
|---------------------------|-------------------------------|--------------------------------------|------------------------------|-------------|
|                           | Gas Equipment                 |                                      |                              |             |
| Leaf Blower               | 30.4%                         | 61,104                               | \$50                         | \$3,055,200 |
| String Trimmer/Edger      | 40.6%                         | 81,606                               | \$50                         | \$4,080,300 |
| Hedge Trimmer             | 15.6%                         | 31,356                               | \$50                         | \$1,567,800 |
| Chainsaw                  | 29.4%                         | 59,094                               | \$50                         | \$2,954,700 |
| Self-Propelled Push Mower | 47.0%                         | 94,470                               | \$100                        | \$9,447,000 |
| Riding Mower              | 5.6%                          | 11,256                               | \$200                        | \$2,251,200 |
| Replacement Battery       | Not Applicable                | 31,356                               | \$25                         | \$783,900   |
|                           | \$24,140,100                  |                                      |                              |             |







### Cost to Purchase

Modern researched market cost data to establish average price ranges for GPLE and ELE.<sup>41</sup> Modern also collected price ranges of the top three bestselling models in each category from popular retailers. For bestselling ELE models, the purchase price includes a battery and charger.

| Equipment Type            | Purchase Price of | Purchase Price of | Purchase Price of | Purchase Price of |
|---------------------------|-------------------|-------------------|-------------------|-------------------|
|                           | GPLE              | ELE               | GPLE              | ELE               |
|                           | (Market Data)     | (Market Data)     | (Bestsellers)     | (Bestsellers)     |
| Leaf Blower               | \$60-390          | \$35-270          | \$260-280         | \$130-150         |
| String Trimmer/Edger      | \$250-300         | \$300-350         | \$220-320         | \$160-190         |
| Hedge Trimmer             | \$250-350         | \$100-200         | \$380-410         | \$130-150         |
| Chainsaw                  | \$100-200         | \$200-400         | \$220-450         | \$150-380         |
| Self-Propelled Push Mower | \$250-400         | \$500-1000        | \$400-500         | \$600-800         |
| Riding Mower              | \$750-1000        | \$4500-4800       | \$2700-3000       | \$4500-4800       |





### Cost Savings

| Mowing Time<br>(mins) | Break-even Point (years) |                         | Five-year Savings |                         |
|-----------------------|--------------------------|-------------------------|-------------------|-------------------------|
|                       | Push Mower               | Self-propelled<br>Mower | Push Mower        | Self-propelled<br>Mower |
| 15                    | 3.4                      | 2.8                     | \$48              | \$68                    |
| 30                    | 2.6                      | 2.1                     | \$97              | \$117                   |
| 60                    | 1.8                      | 1.4                     | \$193             | \$213                   |

Note: Gas price used for calculations was \$2.90 a gallon, based on AAA gas price information for the Dallas metro area.<sup>47</sup>





- Rebate Administrative Options
  - Point of Sale
  - Vouchers
  - Receipt Submittal





### LET Plan Strategies for Success



#### Community Engagement

#### In-Person Assistance

Set up information booths at community events, farmer's markets, or city offices where residents can receive assistance with program enrollment and rebate applications.

#### Demonstration Events

Organize events where residents can see and test electric lawn equipment in action. Invite equipment vendors and experts to provide demonstrations and answer questions.

#### Community Events

Host informational sessions or workshops at community centers, local libraries, or neighborhood associations to engage directly with residents.



#### Student Engagement

Partner with schools to educate students about the environmental benefits of electric lawn equipment and encourage families to participate in the program.

#### Multilingual Outreach

Ensure that program materials and outreach efforts are available in multiple languages to reach diverse communities within the City.

#### Feedback Opportunities

Establish feedback methods, such as dedicated phone lines or online forms, to address questions and concerns from residents promptly.



### LET Plan Strategies for Success



#### Get the Word Out

#### **Email Campaigns**

Send targeted emails and newsletters to residents who have expressed interest in sustainability initiatives or have previously participated in similar programs.

#### Website

Create a dedicated website or webpage with program details, eligibility criteria, and instructions to apply for vouchers/rebates.

#### **Regular Updates**

Provide regular updates on program milestones, including the number of participants, emission reductions, and cost savings achieved through the program.

#### **Utility Bill** Inserts

Include program information in utility bills to ensure widespread visibility among residents.

#### **Press Releases**

Issue press releases to local media outlets to announce the program's launch and provide contact information for inquiries.

#### **Success Stories**

Share success stories of residents who have made the switch to electric lawn equipment and highlight their experiences.

#### Influencers

Seek endorsements and support from community leaders, influencers, and local celebrities who can encourage residents to participate in the program.



## LET Plan Strategies for Success



- Potential Milestones
  - Participation Rate
  - Equipment Purchases
  - Emissions Reduction
  - Cost Savings
  - Retailer Participation
  - Resident Satisfaction





### Status Update



### Where are we in the City's transition?

- PKR transitioned 5% of their equipment. Expecting 10% transition by end of 2024.
  - \*Note: PKR owns 50% of City-owned landscape equipment.
- Aviation transitioned 38% of its equipment. Expecting 40% transition by end of 2024.

### Transition Challenges

- Budget Shortfalls
- Building infrastructure: Electrical capacity upgrades required
- Battery technology and power parity



### **OEQS Next Steps**



### · 2024

- Seek formal Council adoption of the plan
- Release RFP seeking partnership with retail stores
- Finalize the application process
- Select vendor(s)
- Finalize and implement an outreach program

### · 2025

- Initiate residential rebate program
- Clarify departmental needs for budget discussion
- Continue to identify business sector needs to expand rebate program
- Update PTE Committee on plan implementation



### **LET Plan Next Steps**



- Landscape Business Impacts
- Technology Readiness
- Equity Considerations











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