

## **DUBLIN SUSTAINABILITY ADVISORY TEAM**

AUGUST 31, 2021



#### **AGENDA**

- Introductions
- Housekeeping
- 2019 Recap
- 2018 2021 Sustainability Framework Update
- Break
- Future Framework
  - Staff Presentations
  - Discussion
- Current + Upcoming Projects





#### **APPROVAL OF MINUTES**



Any edits or changes to the minutes from our previous meeting on December 10, 2019?



### **RECAP**

# 2019

- Introduction +
   Overview of Scope
   and Role
- City Progress +
   Opportunities and
   Challenges
- Framework 2.0 (Scoping Exercise)

# 2020

Did Not Meet

## 2019

Final Two Meetings

Review + Update

 General Goals + Future Efforts



#### **2019 DECEMBER WORK SESSION**

- Green Space
- Water
- Waste Reduction
- Mobility + Transportation
- Energy + Air Quality
- Built Environment

- ✓ Quality of Life
- ✓ Resilience
- ✓ Community Education + Involvement





NATURAL RESOURCES	
Increase Pollinator-Friendly Areas - Add minimum of 5 native plant areas annually to	Complete
open space and right-of-ways.	Complete
Develop Wildlife Management - Prepare management plans for deer, coyote, and skunk	In Progress
by 2020.	III I Togress
Develop Wildlife Management - Train 10 Park Ambassadors to conduct bio surveys and	In Progress
provide public education for park visitors.	III I Togress
Conduct Major Water Monitoring Evaluations - Achieve at least 4 evaluations annually.	Complete
Increase Public Awareness and Education for Peaceful Co-Existence with Wildlife -	Partial
Condut at least 5 community/HOA wildlife information sessions annually.	Complete
Increase Public Awareness and Education for Peaceful Co-Existence with Wildlife -	
Achieve at least 4,000 uses of nature edcuation website pages and social media posts	Complete
annually.	
Collaborate with Dublin City Schools and Emerald Campus to Add an Environmental	On Hold
Science Track	OH Hold
Increase Resident Participation in Community Gardens and Certified Backyard Wildlife	Partial
Habitats - Add 30 or more certified backyard habitats to the City annually.	Complete
Thankato Than 50 of more certified backyard habitato to the oity annually.	Complete



SUSTAINABLE NEIGHBORHOODS AND BUILT ENVIRONMENT	
Adopt Complete Streets Policy	Resolution Adopted
Increase Percentage of SUP by 1% by 2020	Completed
Update Zoning Code to Encourage Sustainable Development Practices	In Progress
Provide Opportunities to Implement Energy Conservation Practices	Not Started

CITY OPERATIONS	
Transition Boards, Commissions, and City Council to Becoming Paperless	Fully Transitioned
Mitigate Idling by City Vehicles	Yes
Edcuate Staff on City Procurement and Purchasing Policy Regarding Prefernce for Products Derived from Recycled Materials	In Progress



RECYCLING AND DIVERSION	
Increase the Community's Diversion Rate - Increase diversion rate from 49% to 55% by 2020.	52%
Increase the Dublin Irish Festival Diversion Rate - Increase diversion rate from 23% to 30% by 2020.	41%
Increase Internal (Employee) Recycling - Employee survey demonstrating increased awareness and recycling efforts.	In Progress

COMMUNITY ENGAGEMENT	
Increase GreenSpot Membership - Increase membership by 50% by 2020.	49% Increase
Increase Exposure of Dublin Sustainability	Yes
Create an External Advisory Group	Yes
Create a Sustainability Webpage	In Progress



ENERGY AND AIR QUALITY	
Install a Solar Energy Array at a City Facility - Provide at least 15% of the facility's	0%
electricity demand from the solar installation.	<b>0</b> 70
Install New Chillers at the Dublin Community Recreation Center That Take Full Advantage	
of the City's Geothermal System - Reduce the amount of electricity purchased from the	Complete
utility community to less than 1.5 million KWHs per year.	
Replace Interior Lighting at the Dublin Community Recrecation Center with LED Fixtures -	Partial
Achieve at least 90 percent of fixtures converted to LED.	Complete
Reduce City Vehicle Emissions and Dependence on Petroleum Fuel - Achieve 20%	In Progress
reduction in vehicle emissions by 2020.	
Assist Resdients and Corporate Residents in Reducing Emissions by Providing Alternative	
Fueling Choices to the Public - Increase the number of privately owned vehicles	Partial
(individual and corporate) using the City's CNG station or electric vehicle charging	Complete
stations by 20%.	



MOBILITY	
Support Economic Development - Create a mobility plan for workforce development and	Complete
business community.  Expand Multimodal Options Citywide - Pilot at least two non-automotive transportation	Partial
projects.	Complete
Implement Strategies to Encourage Sustainable Transportation Options and Behavior -	
Implement at lest three of five transportation options from objectives within the Mobility	In Progress
Study.	
Promote Equitable Access to Mobility - Create a circulator that provides greater mobility options for older adults and indviduals with disabilities.	Complete
Preserve Our Environs by Focusing Future Growth - Improve walkability in all Dublin	In Progress
neighborhoods.	38.555

ECONOMICS	
Engage with Green Companies and Increase Awareness	In Progress
Increase Green Encouragement Programs	Complete
Create a Green Business Roundtable	On Hold



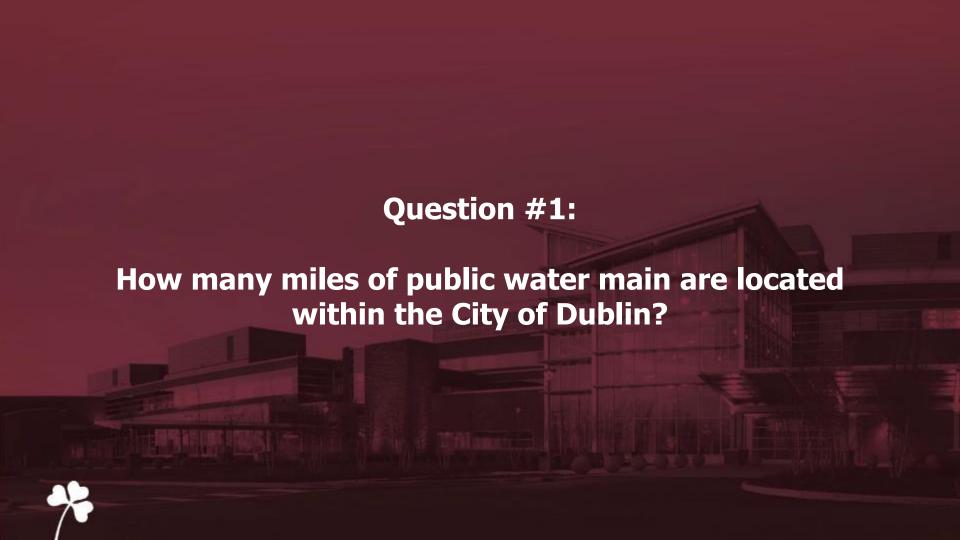
# **BREAK**



# C. Aaron Stanford, P.E., CSSBB Deputy Director of Engineering – Utilities

- Water
- Sanitary Sewer
- Stormwater





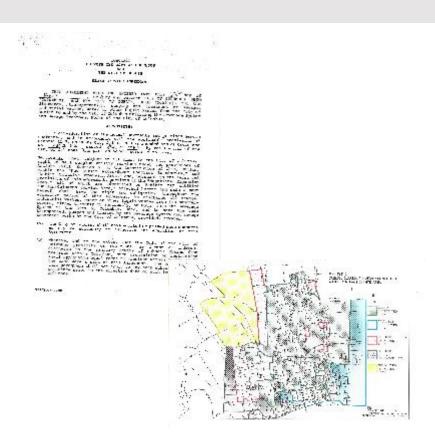




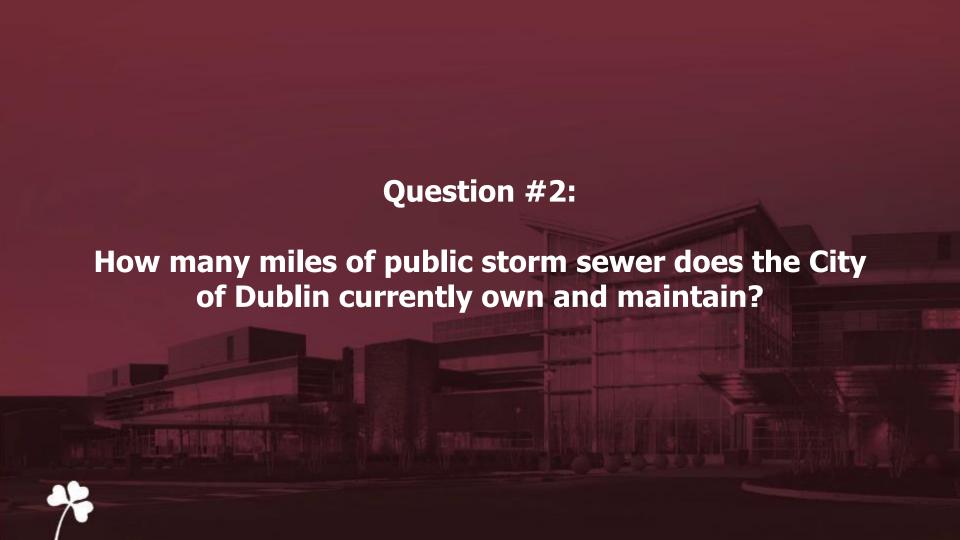


#### Water and Sewer Agreement - 1993

- City of Dublin is supplied water for domestic use by the City of Columbus through an agreement approved in 1993.
- The City of Columbus treats the potable water and has a water quality lab where frequent testing of the water is performed.













Drainage Basins Dashboard

**Total Basins** 

**≋**581

**Dublin Basins** 

**≋195** 

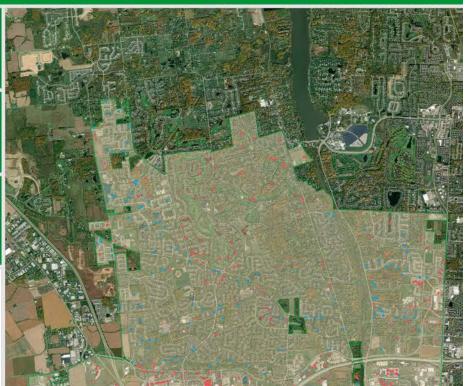
Other Basins

**≋373** 

Average Condition Score

 $\otimes$ 62

Goal = 70





## Why so much infrastructure?

- Quantity Control: Conveys stormwater runoff and reduce flooding and ponding of water.
- Quality Control: Requirement for areas to provide for the treatment of the stormwater prior to release.
- Regulated by both the Ohio EPA and the City of Dublin Chapter 53: Stormwater Management and Stream Protection Code



Stormwater Management Design Manual

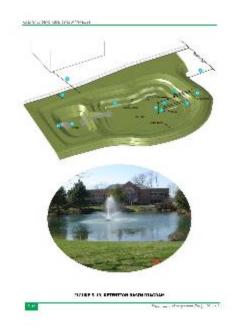
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#### Stormwater Retention Basins

- Most popular method to address stormwater requirements.
- More density = selection of other methods of treatment.
- Developed release rate (quantity control)
- Water quality component that helps removes silt and sediment.











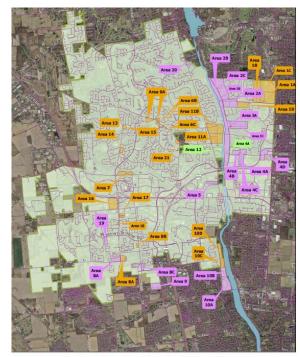
#### Sanitary Sewer System

- Not connected but can impact the water quality.
- Sanitary system overflows due to heavy inflow and infiltration or other system issues.
  - Sanitary Sewer Lining Program
  - Sanitary Manhole Rehabilitation Program
  - Real time monitoring of all lift stations.



#### Water and Sanitary Sewer Unserved Areas

On December 7, 2015, City Council adopted a Policy regarding public water and sanitary sewer utility extensions to areas that do not currently have access to these public services. The Policy outlines a process by which the City will identify, prioritize, program and implement the design and construction of public utility service extensions.





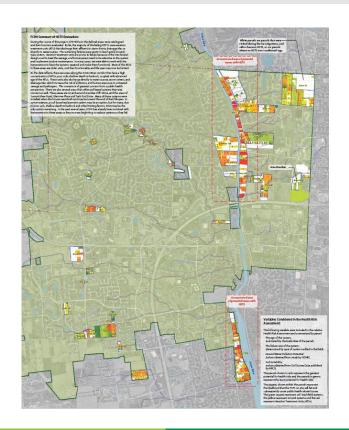
Water/Sewer Extension Areas General Location Map August 3, 2015





#### Goals

- Protect public health, safety, and welfare of residents
- Provide access to the Public Sanitary Sewer and Water Systems throughout Dublin
- Equitable, documented, uniform, systematic process for extending service.
- Code language that reinforces the Policy direction established by Council that can be easily administered.
- A Policy that is clear, concise, and supports the implementation of this program.







#### **Waterways Maintenance Program**

#### Waterway Maintenance Program

Waterway inspections have been performed throughout the City of Dublin by Franklin Soil and Water that have identified areas of deficiencies.

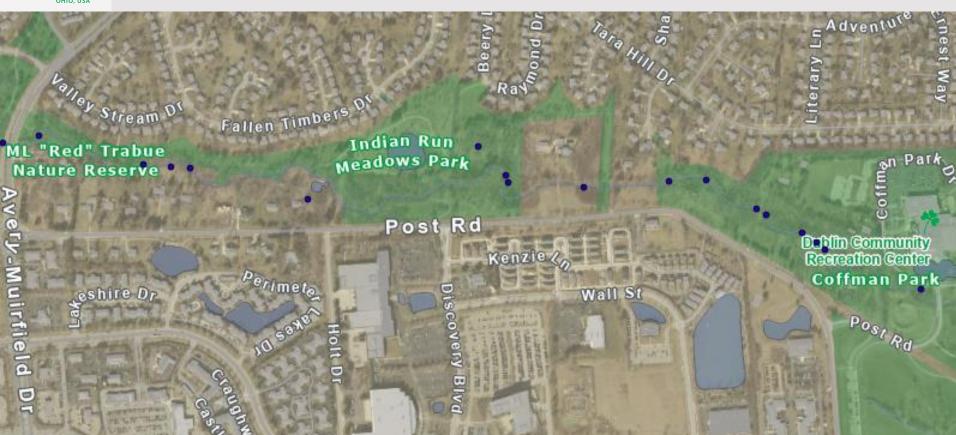
These deficiencies are mainly comprised of:

- Areas of erosion (minor, moderate, major)
- Waterway blockages
- Dumping of materials
- Standing water
- Outfall blockages

These inspection were performed over a four year timeframe, with 2021 being the final year of waterway inspections. Over 325 inspection were completed through the end of 2020.



## **Waterways Maintenance Program**

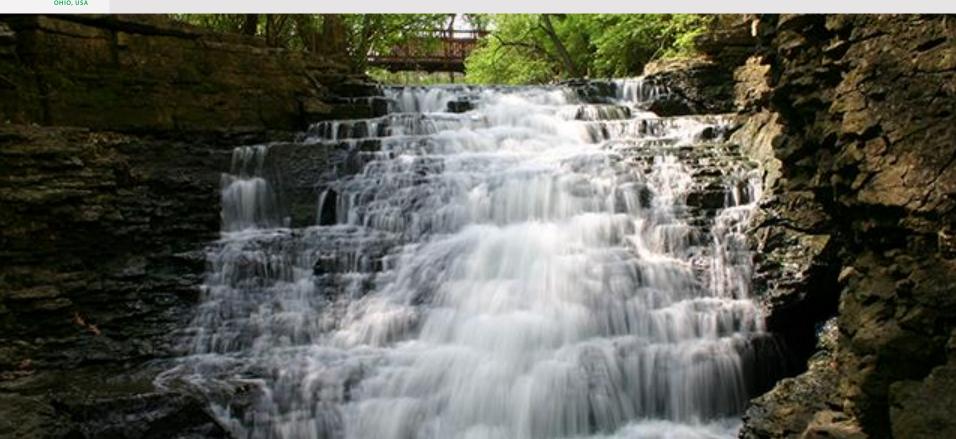




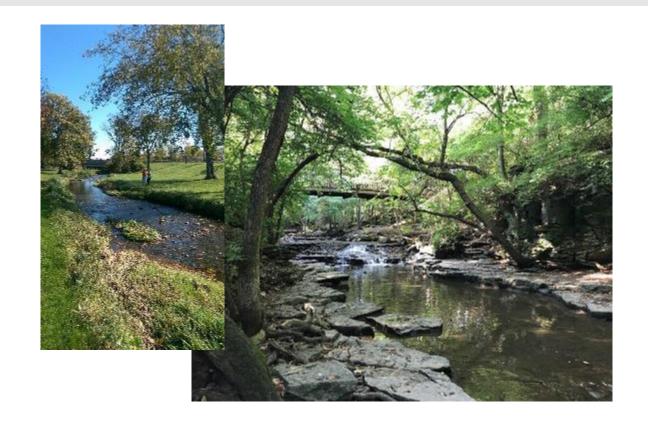
#### Why is this important

- Most of the collected stormwater ultimately outlets to a stream or river.
- Water is an important natural resource
- Adds value to properties and the community
- Protects public safety through flood protection and water quality preservation
- Riparian and aquatic habitats
- The water in our streams and rivers are treated by City of Columbus water treatment plants and sent back to users as our public water source.













#### **DUBLIN MOBILITY STUDY**

#### **BACKGROUND**

The Dublin Mobility Study is the City's strategic plan for innovative transportation network improvements to support the community's evolving mobility needs.







#### **DUBLIN MOBILITY STUDY BACKGROUND**

#### **TIMELINE**



- Stakeholders identified
- Public workshop
- Vision
- Key Objectives
- Strategic priority areas
- Action plan
- Connected Community
- Implementation of micro-transit and shared micromobility pilots
- Grant funding & sponsorship
- Transition microtransit pilots to permanent mobility programs
- Identify funding options

- Program refinement
- Implementation of shared micro-mobility options, mobility hubs, and bike loops



### **DUBLIN MOBILITY STUDY**

### **KEY OBJECTIVES**











### **DUBLIN MOBILITY ECOSYSTEM**

#### STRATEGIC MOBILITY PRIORITY AREAS





#### **MOBILITY PRIORITY AREA – MICRO-MOBILITY**



CoGo Bike Share
Docked & dockless
bike share; integrated
with Lyft



**Bird "Scooter Share"**Fleet Manager Program



TRIP E-bike Share
Local company with
dockless e-bikes



#### **MOBILITY PRIORITY AREA – MICRO-MOBILITY**

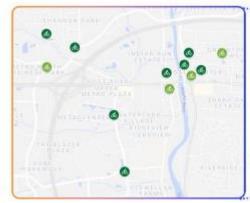
► SHARED MICRO-MOBILITY (BIKE SHARE & SCOOTERS)

MOBILITY HUBS WAYFINDING

OSU's City & Regional Planning Studio

Recommended 16 CoGo station locations

Suggested possible funding sources







#### **MOBILITY PRIORITY AREA – MICRO-MOBILITY**

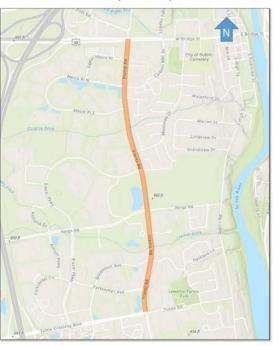
## **Frantz Road Alternative Transportation Study**

#### **Recommendations**

- 'No Build' Alternative
- City Code revisions
- Demonstration project

Alternative	Impact Description			
No Build	No impacts.			
1	Fair amount of roadway work needed. Reduced construction timeframe due to avoidance of drainage/utilities. Long-term lane closures.			
2	Significant roadway and drainage work needed. Longer construction timeframe due to drainage/utility relocation. Long-term lane closures.			
3	No roadway work needed. Path along one side replaced.			
4	No roadway work needed. Paths along both sides replaced.	0		
5	Fair amount of roadway work needed. Reduced construction timeframe due to avoidance of drainage/utilities, Long-term lane closures.	0		
6	Roadway work limited to resurfacing and restriping. Reduced construction timeframe due to avoidance of drainage/utilities.	9		

#### Study Area Map

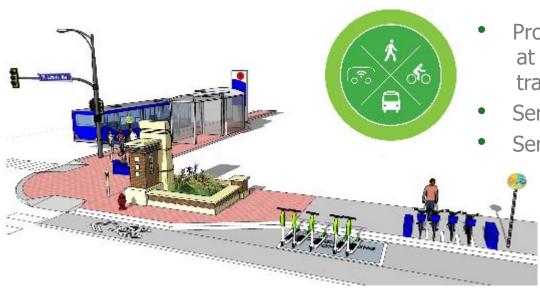




#### **MOBILITY PRIORITY AREA – MOBILITY HUBS**

#### **SHARED MICRO-MOBILITY (BIKE SHARE & SCOOTERS)**

# MOBILITY HUBS WAYFINDING



- Provide a space to co-locate at least two modes of transportation.
- Serve as transfer points.
- Serve as landmarks



#### **MOBILITY HUBS**

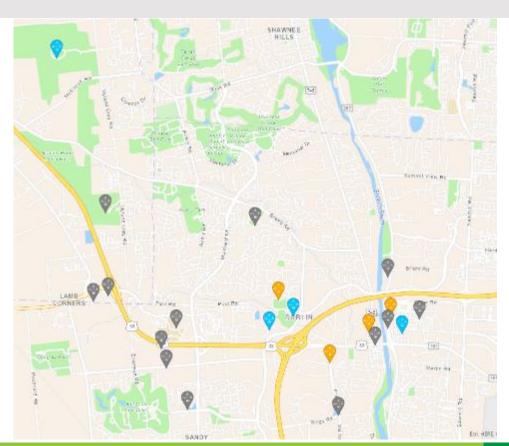
#### Phase 1



- 2. CML Dublin branch
- 3. North Market Bridge Park
- 4. Frantz Road & Metro Place North

#### Phase 2

- 1. COTA Park & Ride
- **Dublin City Hall**
- 3. Emerald Pkwy & Coffman Park Drive
- 4. Glacier Ridge Metro Park (North)



#### **Future Phases**



- **Dublin Arts Council**
- East Plaza & Riverside Crossing Park
- 3. Frantz & Rings Roads
- **Dublin Service Center**
- 5. Dublin Methodist Hospital
- 6. Community Pools (North and South)
- 7. OSU Ambulatory Care Center
- OU Dublin Branch
- Glacier Ridge Metro Park (South)
- 10. Eiterman Road Park & Ride
- 11. Greystone Mews





## **MOBILITY HUBS**

Mobility Hub Typology	Tier	Potential Locations	Mobility Options
Downtown Hubs	1	Dublin Library Parking Garage and North Market Bridge Park	Dublin Connector, docked Bike Share, dockless Bike Share, Scooters, Bike Loops, Mobility Kiosk, ride hailing pick-up/drop-off, Shelter
Park & Ride Hubs	1	COTA Park and Ride and Eiterman Road Park and Ride	COTA fixed route service or ridesharing, Dublin Connector, docked Bike Share, dockless Bike Share, Scooters, Bike Loops, Mobility Kiosk, ride hailing pick-up/drop-off, Shelter
Campus & Community Center Hubs	2	Dublin Community Recreation Center, Dublin City Hall, Dublin Service Center, Emerald Pkwy & Coffman Park Drive, Dublin Methodist Hospital, OSU Ambulatory Care Center, Ohio University - Dublin campus, North & South Community Pools, Dublin Arts Council	Dublin Connector, docked Bike Share, Bike Loops, Mobility Kiosk, Shelter
Neighborhood Center Hubs	3	Glacier Ridge Metro Park, city parks, and residential areas at a common access point	Dublin Connector, docked Bike Share, Bike Loops



#### **DCRC MOBILITY HUB**

#### PHASE 1

- Shuttle Shelter
- Relocate bike racks
- \$20,000 request to AARP

#### **FUTURE PHASES**

- Docked bike share
- Wayfinding information & mobility kiosk
- Other improvements via public feedback

#### **DUBLIN COMMUNITY RECREATION CENTER (DCRC)**





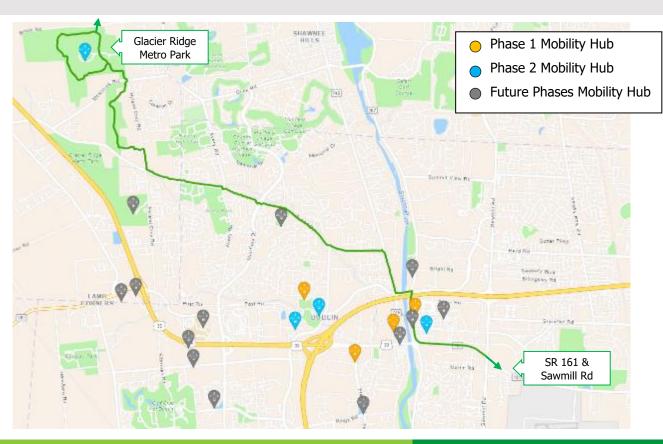
#### **NEW REGIONAL TRAIL IN DUBLIN**

#### **Emerald Trail**

- 10 miles
- 1 hour
- Burn 480-710 calories
- Serves as backbone of bike loop network

#### **Mobility Hubs**

- North Market Bridge Park
- COTA Park and Ride
- Glacier Ridge North
- East Plaza
- Community Pool North
- Dublin Arts Council





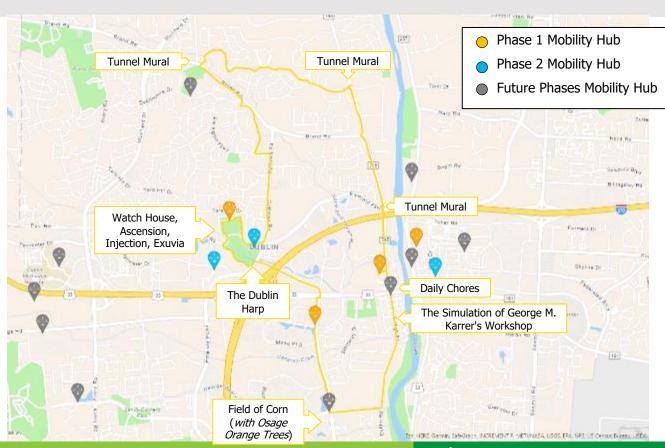
#### **WAYFINDING - DUBLIN BIKE LOOPS**

# **Public Art Bike Loop**

- 9.5 miles
- 50 minutes
- Burn 400-600 calories
- 8 public art sites
- 3 tunnel murals

#### **Mobility Hubs**

- DCRC
- CML Dublin branch
- Emerald & Coffman
- Frantz & Metro Pl N
- Dublin City Hall
- Visit Dublin Ohio
- Frantz & Rings
- Dublin Arts Council



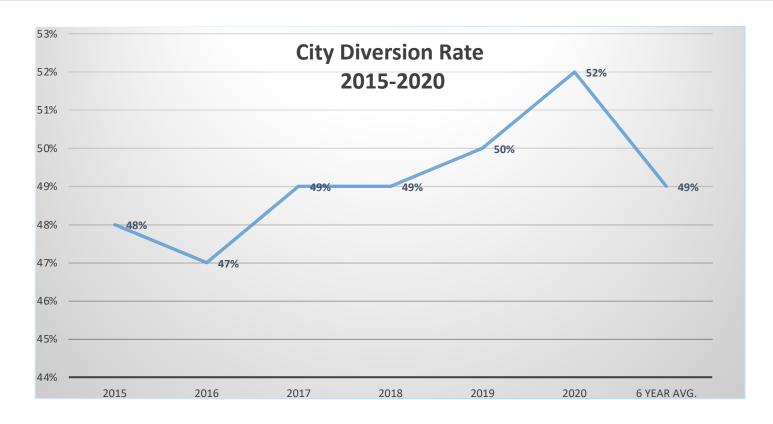


## **QUESTIONS**



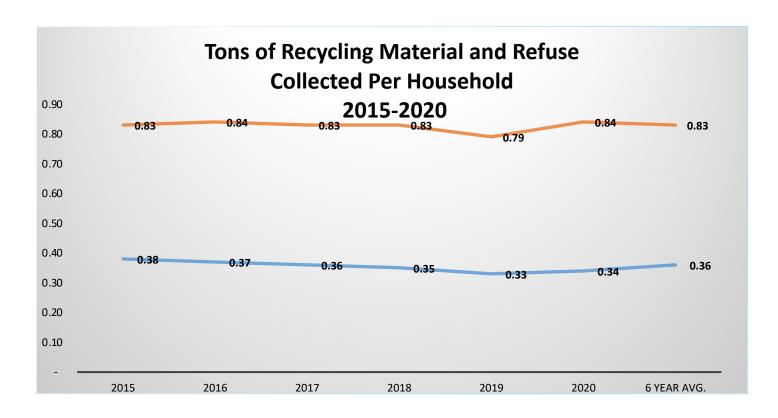


### **SOLID WASTE**





#### **SOLID WASTE**

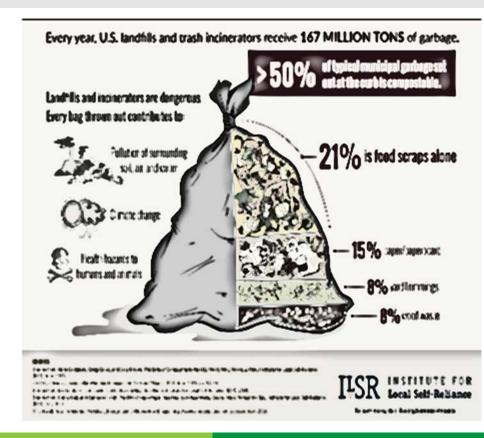




# City of Dublin's Why.....

# **Franklin County Sanitary Landfill**

- Receives over 1 million pounds of food scraps from communities within Franklin County each day
- Food Scraps account for 15% -18% of the landfill capacity
- Food Scraps identified as the largest opportunity for increasing diversion







# City of Dublin's Why....

# **Additional Tonnages**

- Household Hazardous Waste Tons 24.31
- Paper Shredding Event Tons 12.38
- Electronic Waste Tons 17.58
- Food Waste Recycling Tons 15
- Scrap Metal Recycling Tons 25.73
- Additional Yard Waste (Parks) Tons 41.95
- Chipping Tons 653.40
- Leaf Collection 967.80 Tons
- 2020 Diversion Rate 51.5%
- Diversion Rate If Able To Divert Food Waste -63.47%





# GoZero Do's and Don'ts.....

## **Acceptable Items**

Fruits, vegetables, grains, pasta, baked goods, beans, coffee grounds, coffee filters, tea bags, eggs, eggshells, dairy, cooked and raw meat, wood, shellfish, seafood, bones, cut up greasy pizza boxes, soiled non-coated paper products, napkins, tissues, pumpkins, dead flowers, and BPI Certified **Compostable Plastic Items including** liners, straws, plates, bowls, knives and spoons.

## **Non Acceptable Items**

Rocks, stone, glass, metal, steel, tin, aluminum foil, electronics, Styrofoam, personal health care products, pharmaceuticals, noncompostable packaging, coated paper/fiber products, and non BPI Certified plastic items.



# City of Dublin Results....

#### 1 Year Results

- Finished 1 Year with 746 active registrants
- Collected 96,861 pounds of residential food waste
- 1,740 pounds of food waste collected each week
- Increased service to (12) 65 Gallon GoZero Carts serviced weekly
- The City of Dublin Food Scrap Composting Platform is being utilized as the model for rolling out new programs throughout Ohio





# **Pumpkin Composting Autumn 2021**

## **Pumpkin Composting**

- Pumpkin Composting Event to be held at the Dublin Service Center during the Autumn of 2021
- Pumpkins are great for composting due to their high water content
- Pumpkins are also great food for the animals at the Columbus Zoo
- October 18 through December 10





# **FUTURE DIVERSION ACTIVITIES**

# (2) SWACO Community Reduction Grants

- 2021
- (2) Solar Powered Big Belly Compactors for the new Bridge Street Park
  - Completely Solar Powered

Opportunity to Save Labor and Capital Funds due to capacity and software notifications when full. Interchangeable Message Boards will be utilized to advertise City of Dublin Diversion Initiatives including Shred Events, HHW Events, Composting and Other Recycling Opportunities





#### **FUTURE DIVERSION ACTIVITIES**

# 2022 SWACO Community Waste Reduction Grant Application

- Downtown Dublin and Historic Dublin Glass Bottle, Plastic Bottle and Aluminum Can Recycling
- (35) 95 Gallon Recycling Containers and
   (35) Slim Jim Bar Side Recycling Containers to be distributed
- Modeled after the Short North Glass Program
- Serviced by Rumpke on Regularly Scheduled Day



# **Questions?**





## **FUTURE FRAMEWORK – EDUCATION + ENGAGEMENT**





## **ENCOURAGING ENVIRONMENTAL EXCELLENCE (E3)**





#### **CURRENT PROJECTS**

## **City's Energy Contract**

- City's energy contract expires in 2021.
- Staff preparing to prioritize renewable energy for next contract.

## **Recycling Drop-Off Program**

- Working with SWACO to identify a location for drop-off recycling program.
- Provides recycling opportunity for small businesses and multi-family tenants that may not currently have the option.





#### **DECEMBER 7 – SUSTAINABILITY ADVISORY TEAM MEETING**



- Final meeting
- Look to bring forward a rough draft of future sustainability framework
- Seek feedback around goals/objectives



# **ROUNDTABLE + QUESTIONS**