Planning for Community Resiliency: Looking Beyond Hazard Response

Presenters:

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Municipal Services
District

Introduction

The Greater Salt Lake Municipal Services District serves 5 Metro Townships, the Town of Brighton and Unincorporated Salt Lake County.





Service Areas and the General Plan Process

Adopted Magna

Adopted Kearns

Adopted Copperton

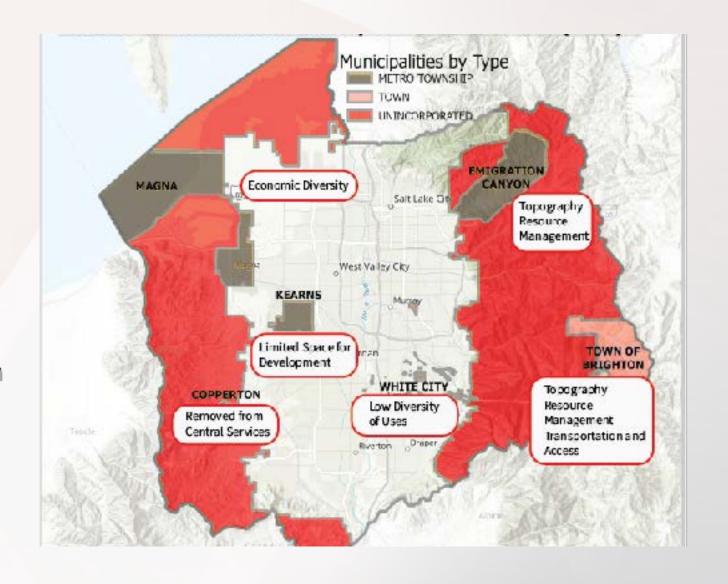
Drafted White City

Drafted Emigration Canyon

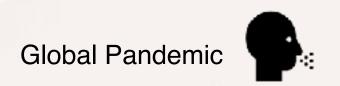
In Process Town of Brighton

In Process Sandy Hills

In Process Granite





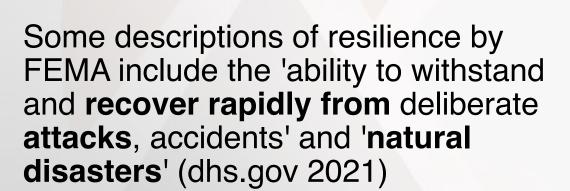


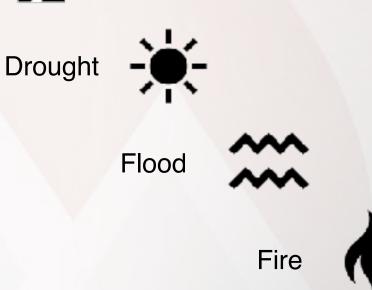
Resilience

Earthquake



The FEMA office of Resilience's Mission is to 'build a culture of preparedness' to create a 'prepared and resilient nation' (FEMA.gov 2020)





















Safety & Security

Food, Water, Shelter

Health & Medical Energy (Power & Fuel)

Communications

Transportation

Hazardous Material

















Fire Services







Alerts, Warnings, & Messages





























Finance



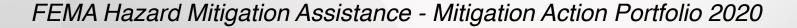




Maritime

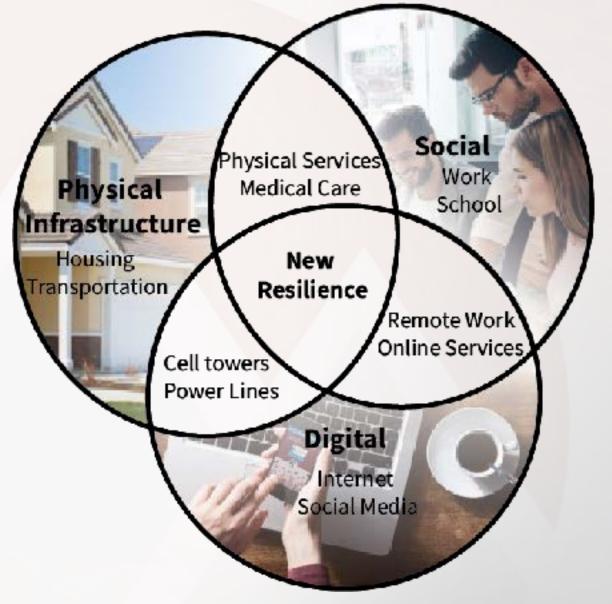




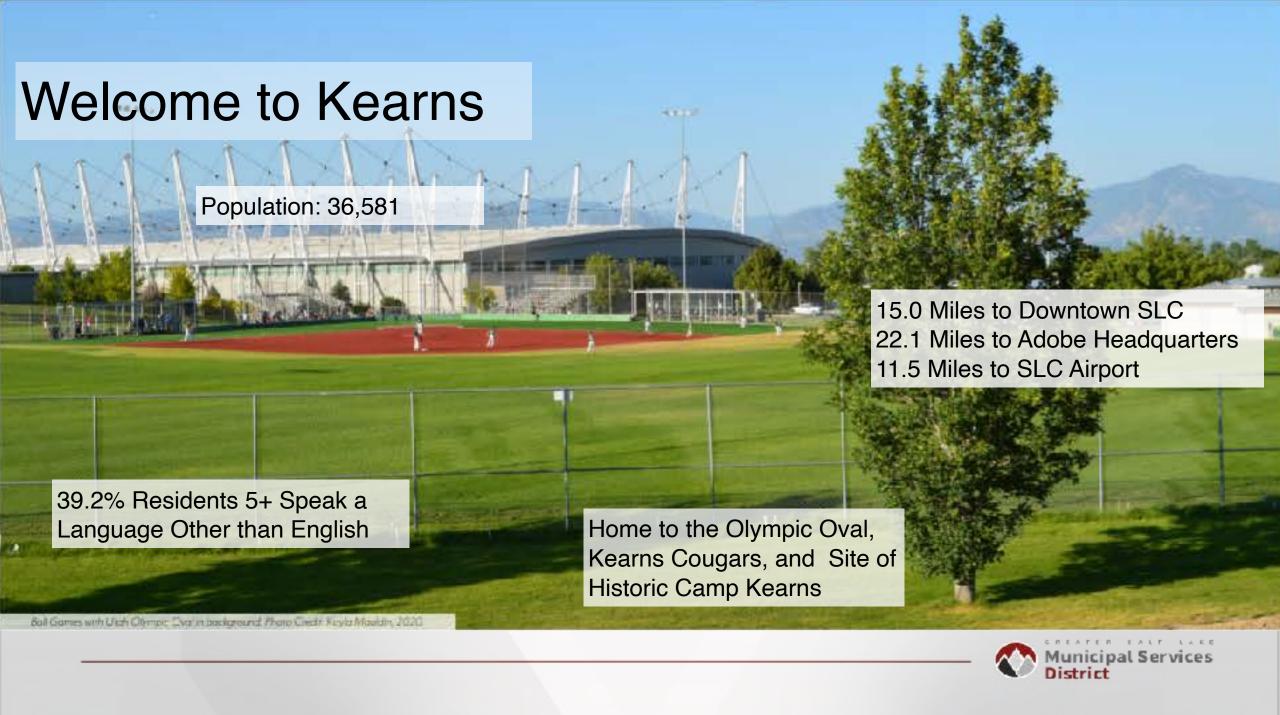




Resilience is the ability for complex systems to change, adapt, and transform, in positive ways and within a reasonable time frame, following hardships and disasters (adapted from Davoudi, 2021)







Resilience Requires Tackling the Tough Questions

What can a community do to address health inequities?

Can planning improve community pride and strengthen social connections?

How do we support a diverse population with diverse interests?

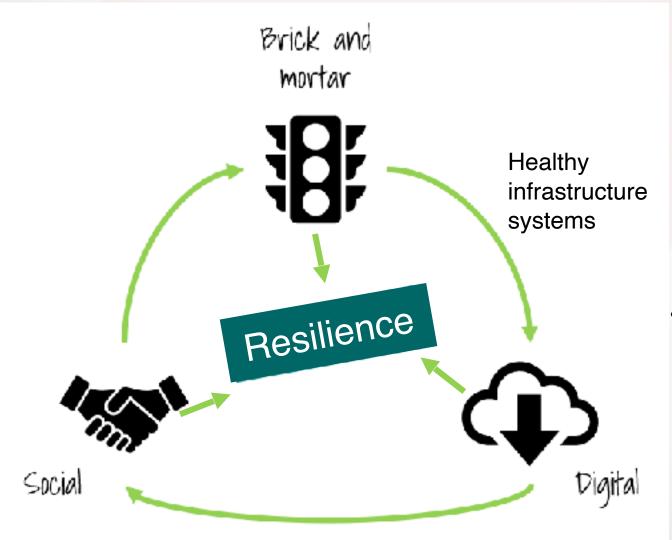
Which groups are underserved by current systems of emergency response or disaster preparation?

How do we ensure long-term maintenance of our physical infrastructure?



The Resilience and Infrastructure Link

Example) A
 healthy social
 infrastructure
 means that
 residents can
 age in place
 without feelings
 of isolation or
 disconnect.



- Example) A
 functioning Brick and
 Mortar Infrastructure
 System allows
 emergency personnel
 to effectively reach a
 site and provide
 services.
- infrastructure system means that residents can receive important notices and communications, and the community can adjust to situations that demand remote work or learning.



The Approach

Assess

Existing

Condition



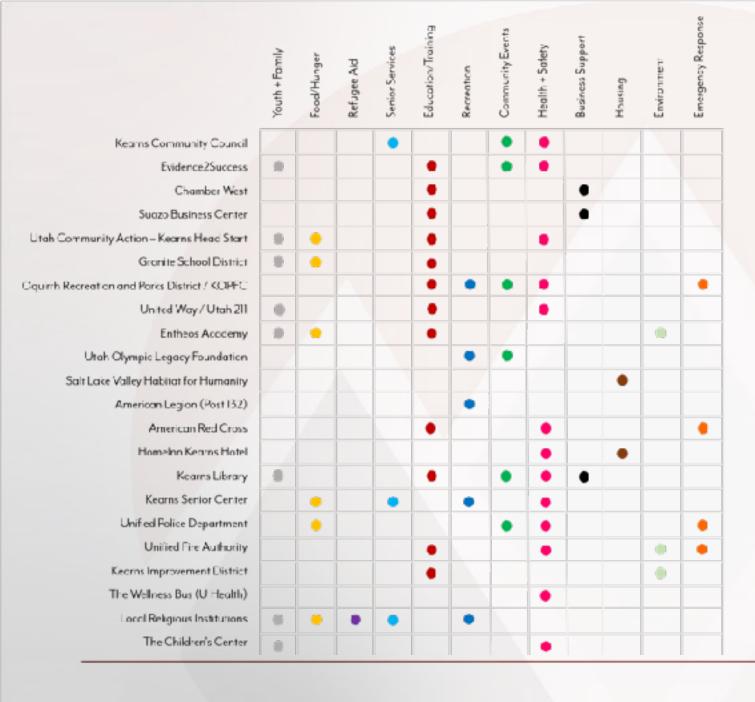
Plan for Short-Term and Long-Term Gaps

Collaborate

with

Partners





SOCIAL

- Assess: availability, reach, mission of community organizations
- Identify: assets, such as Evidence 2 Success, active in health and safety
- Collaborate: by inviting organizations into the planning process and uniting shared missions
- Plan: by leveraging existing assets to address community challenges. Worked with Evidence2Success to obtain Healthy Utah Community Designation.

Figure R37: Advertisement for Granite School District Wifi Bus Program



STUDENT WIFI BUSES

In the Spring of 2020, soon after schools transitioned to distance learning. Granite School District sent buses around the communities it serves. The buses were configured with will hat spats and were parked around high density residential areas to help boost with signal for students. Two buses were parked more Kearns, in Loder Park and Southridge Park.

Source: M Chaimers, 2020

DIGITAL

- Assess: existing infrastructure and gaps, such as Kearns' Digital Divide
- Identify: programs working to expand digital access and proficiency (such as Granite School District's Wi-Fi Buses)
- Collaborate: with partners to address needs. MSD/SLCo partnership resulted in a grant to assess and improve digital infrastructure MSD-wide.
- Plan: for expansion of fiber and hotspots, additional training, and streamlined communications





Single-Family Detached

9,715 occupied units (92,9%)

Primarily owneroccupied

(aura Krester, 2020)



Single-Family Attached

125 occupied units (1.3%)

Primarily owneroccupied

(Trulia, 2020 – Example from West Valley City, UT)



Duplex

27 occupied units (0.3%)

Primarily renteroccupied.

(Render, 2020)



5+ Apartment Building

383 occupied units (3.9%)

Primarily renteroccupied.

(Render, 2020)



Mobile Home/Other

167 occupied units

Primarily owneroccupied.

(Realtor.com, 2020)

BRICK AND MORTAR

- Assess: items such as condition, age, type, and affordability of housing.
- Identify: strengths to leverage, such as Kearns' comparatively low housing costs.
- Collaborate: with partners, including SLCo, to address challenges such as lead in homes and lack of infrastructure for ageing in place.
- Plan: to establish programs that improve resident self-sufficiency and housing condition, such as a tool-sharing program or revolving fund for home repair and renovation.



What are our successes?

- ✓Increased community pride recognition of existing assets
- ✓ More collaboration between stakeholders, and particularly between community organizations and service providers
- √Generation of interest in the Kearns community
- ✓ Development of an actionable work program
- ✓ New framework for thinking about community resiliency
- ✓ Planning Commission education and discussion of difficult topics



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The suppose of the model outing the parallellar influence from all and a sum for model acting flower interspects in all the present according from the substance and instance.

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Figure R20: "Kearns Stone Strong"



ment during the CCMD 19 sandlerse (Source: 49C4 Nine

Correspilly Execute Strengthen Ties

Who lines that a beciscon community of eyer 35,000 people, cooled in quicky proving Set Lake Melacustran June, poole often existence in sub-speed the cord that should not look of an oblig American speed tower Koome is tody as managined assertants. Actual months being moderns register, microstomy holotopic allesing speeds and several, microstopic and admired constructly identify. These teams given many may be and or a subscript after the contract of the contr

Fail Forest

 Annual Utah Olympic Oral Trick or True Secretics provides a rate space for dislates to participate in Hallower parenting and offents worky term in board loop banks.

Winter Events

- Christmas on 54th, improved by the Keepin Community Count food providing On terms, are until light deploys to spread helicidity on charge residents.
- Utah Otyapic Oval Halliday Featival, on amend community tectron that include earth, pictures with Sonia, quantitatival, and a figure during preference on the Code.

Spring Events

- Annual Community Seater Egg Hunt, experted by Salt Lake County Res Center in pathwish provide General Community Council. This profit was complete in 2021 to most COVID-19 reproduces. A charactery, Easter event was approved with begs of goodes and useful economics for youth and termine.
- Armout Porcoke Bookhair organist by the Unified Fee Automic (LEA).
- Miss Kears Rayerly, a property econograp parentarity serves, sell-learly, and Am. This resilies is one 20 prior and and a heloced staple of the General appropriate.
- Armed Forces Boy, gathers the Community Sturble UFC, UFA the American Legist, and general public to serve old flow professioner ones for the year.
- KOPEC Health Fair, around event which gathers several organizations occur in Kesseni connection health introduce. The event becomes fair activities for families on well published and truth programming.

Summer Events

- Master town Days and Parade, in two sits, monthly at only the Community Council selectioning the Facette community.
- ROPFC's Fire, Wuter, and he Festival, comis it 20th year. This worst instants bounds has music, have, and make.
- Annual Deggy PedSic hold on the host Saturday ofter coder Day at the CONIC.
- Ston's Market Cor Show Course Might, you on the 4th. year.
- Night Out Against Gines, a solutionship between LPC and partie argumentum. This work allows made to turned and content policy officers, helighters, and offer amenticary responses parameter first save Science.
- KOPFC and Utch Olympic Oval Fitting Night Fitchs.
 providing the outdoor mobile spreenings on Organit Plask in February

Non-Annual Events

- Europe: Former's Market or the Senior Cottes with Utah Eriste Estencions, Green Urlan Europhisis, and the Jul. Harbouline Plagneth
- 1000 Sectors We Live Kears Food Direct V. 2020, the United Police Department ILPO Kears: Proper saleshed 3.54 per by terra live time five good to look look table.
- Wassels from Waste and Recycling Arms Commun Days.
 bi-covard.

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Figure R3-924 courts y of the Azoma Community Council (2017-2021).

Reallone: Infrastructure Eloment



Call Out Successes! Be realistic about needs and challenges but lead with a message of hope and provide an actionable plan forward.



End with a Plan of Action! Address challenges identified and make it easy to track progress toward implementation.

| | | | Goal: | Maintain | and enh | ance Kea | rns' brick and mo | ortar infrastructure. | | | | i i |
|--|---|------|-------|----------|---------|----------|---------------------------|--|---|--------------------------------------|---|---|
| Objective 1: Improve infrastructure maintenance. | | | | | | | | | | | | |
| Actions | Product Type | 2021 | 2022 | 2023 | 2024 | 2025 | Responsible Party | Potential Partners | Cost Estimate | Funding Source | Metrics | Resources |
| Connect residents to resources for home repair and maintenance, including energy-saving retrofits. | Education, Engagement, and Advocacy; Grants and Funding | х | × | х | × | X: | MSD PDS; Kearns MTC | SLCo Housing and Community Development Kearns CC | Staff Time | General Fund | Staff updates websites and regularly shares information on home repair and retrofits. | Energy Star Program |
| Work with MSD staff and Keams government to assess the short-term and long-term costs of infrastructure projects. Practice fiscal responsibility by doing the math' before taking on long-term maintenance liabilities. Regularly engage with and include residents in the budget-making process, to understand community needs, priorities, and trade-offs. | Technical Support, Education, Engagement, and Advocacy | x | × | × | × | × | MSD PDS; Kearns MTC | SLCo Engineering: Residents | Staff Time | General Fund; CDBG Funds | Staff regularly considers systems in need of maintenance and creates plans for addressing. Maintenance is prioritized over new construction. | Strong Towns Explanation of the 'Growth' Ponzi Scheme |
| Hold monthly meetings with staff members working in Kearns to coordinate projects, share challenges and innovations, and support efficient design and funding. | Coordination and Collaboration | | x | x | × | x | MSD PDS | SLCo Engineering; SLCo Economic Development | Staff Time; possible costs for food / printing / space rental | General Fund | MSD Staff puts on at least 5 community events per year. | |
| Educate residents on the risk of lead paint, lead plumbing, and radon in homes, and how to monitor and mitigate. | Education, Engagement, and Advocacy | | × | x | × | × | MSD Communicatio ns | SLCo Housing and Community Development Kearns CC | Staff Time | General Fund | Staff updates websites and regularly shares information on lead and radon exposure risk and mitigation strategies. | SLCo Lead Safe Housing |
| Meet with UTA to discuss the improvement of intra- community transit in Keems, so that residents can access not only jobs and hospitals, but also community amenities and the homes of loved ones. | Coordination and Collaboration | | x | x | | | MSD PDS; UTA | SLCo Engineering; Kearns Transportation Working Group | Staff Time: various costs depending on transit improvement strategy. | General Fund; WFRC TLC Program | Staff meets with UTA to discuss community desires for intre-community transit. | Making the case for intra-city (vs. inter-city) transit planning |



What work is left undone?



Full inventory of physical infrastructure and condition (planned within next 3 years)



Resident education on difficult topics such as the digital divide, health inequities, or diminishing water supply (some outreach hindered by COVID)



Repetition of process in other MSD communities, and application of methodology at regional scale





Utah planners are primed to add to the national conversation on emergency management. But we give so much more to our communities when we move beyond the 'return to normal' model of traditional resiliency and instead consider long-term adaptation and community wellbeing.

Explore the Kearns Resilience + Infrastructure Element at: bit.ly/lrp-kearns



Planning Tools for Community Planners

Aligning Physical, Social, and Digital Infrastructure Strategies in Community Planning





Don't plan in a vacuum!

I would like to show you a few cost-effective tools and techniques for giving context and structure to planning conversations, strategy sessions, and the overall planning process.



Issue considered on an island



Issue considered within the general thrust of the planning context

Community Planning and Maintenance Overload!

We do lots of planning for our communities that Influence our ability to be resilient

General Plans

Transportation Plans

Hazard Mitigation

Active Transportation

CIP Lists

Zoning

These plans are generated by a variety of entities and exist at a variety of scales

National

State

Watershed Based

Association of Governments

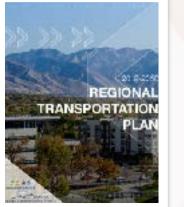
County

Municipal

District

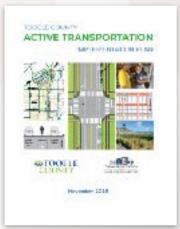


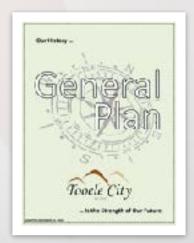






Toroide Courtly General Plun 3/plate con-





State **AOG** County Municipal

Geographic Scale



How can we ensure that we are making the

Best Possible Use

of the hard work completed?





Layering

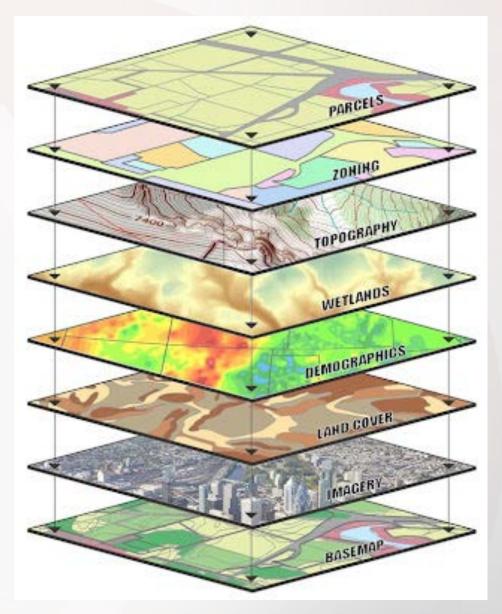
- Technique that changed the way we conducted land use planning
 - Allows us to visualize relationships existing between different elements

Pros

- Allows us to consider individual issues in the context of the greater thrust of planning completed.
- How will an action here effect our plans everywhere else?

Cons

- Resource intensive to set up and maintain
- Available skill sets required amongst staff





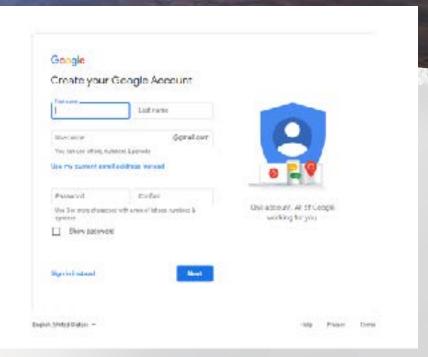
Google Earth

Why use Google Earth for Web?

- · They are free!
- They are intuitive!
- They are already preloaded with all sorts of useful information!

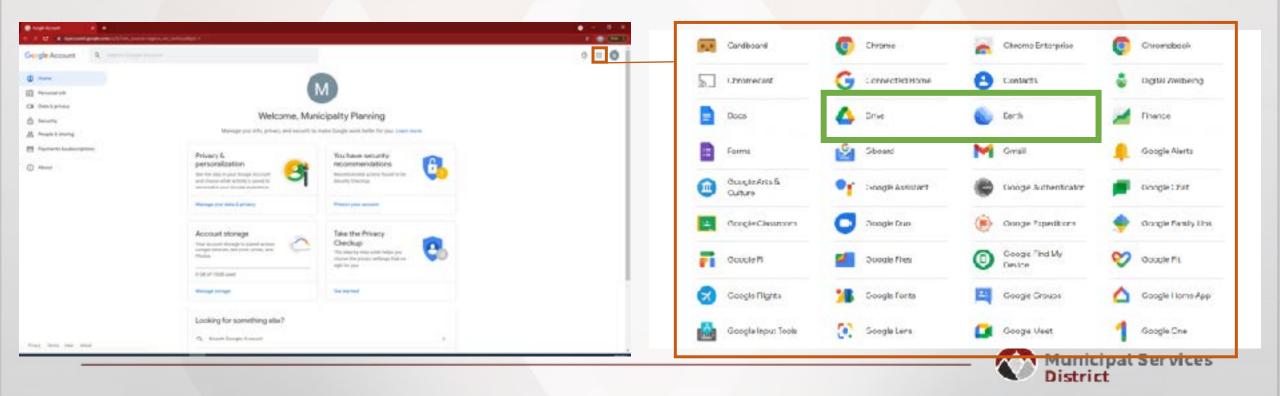
Create Google Accoung for Your Community

Assign a google Earth Czar or Manager....



This gives you access to the whole suite of Google products.

Google Drive and Earth are of most interest to us..



Ask for KMZs or KMLs

- What might be available
 - Layers from your General Plan, Transportation Plan, Hazard Mitigation Plan...
 - Parcel data, building footprints, address points...

Pro Tips

Ask for a 50% transparency and visual layer categorization on all layers before export from GIS..

Simple way to bridge the gap between GIS and the uninitiated!

| Name | Date modified | Туре | Size |
|--------------------------|--------------------|------|-----------|
| Magna Magna | 8/31/2021 11:51 AM | KMZ | 24,610 KB |
| Magna_Boundry | 8/17/2021 1:21 PM | KMZ | 12 KB |
| Magna_BuildingFootprints | 8/17/2021 1:44 PM | KMZ | 93,593 KB |
| Magna_GP_FutureLandUse | 8/17/2021 11:50 AM | KMZ | 4,160 KB |
| Magna_GP_Layers | 8/17/2021 10:56 AM | KMZ | 8,812 KB |
| Magna_Parcels | 8/17/2021 1:23 PM | KMZ | 6,265 KB |
| | | | |



Record Your Ideas by Creating New Features

What types of features Can I create?

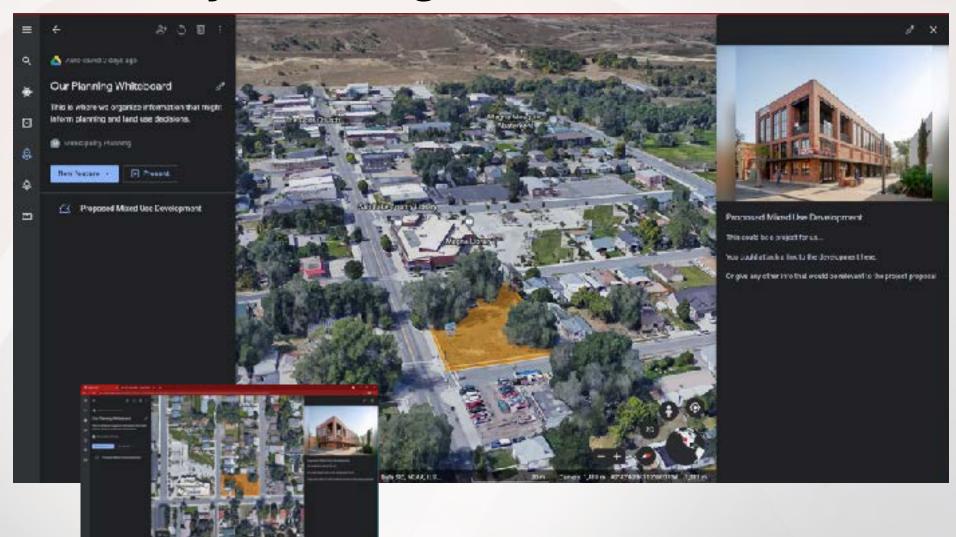
- Points
- Lines
- Polygons

What types of features Should I create?

- Physical Projects Ideas
- Event Locations
- Application Locations

What depth of information can I add to the features I create?

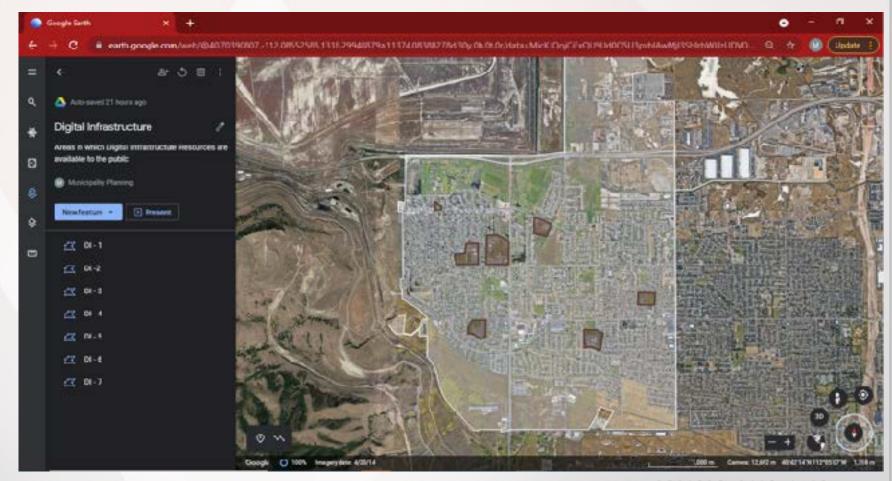
- •Title
- Notes
- Pictures
- Links

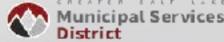




Map Resiliency Infrastructure: Digital Infrastructure

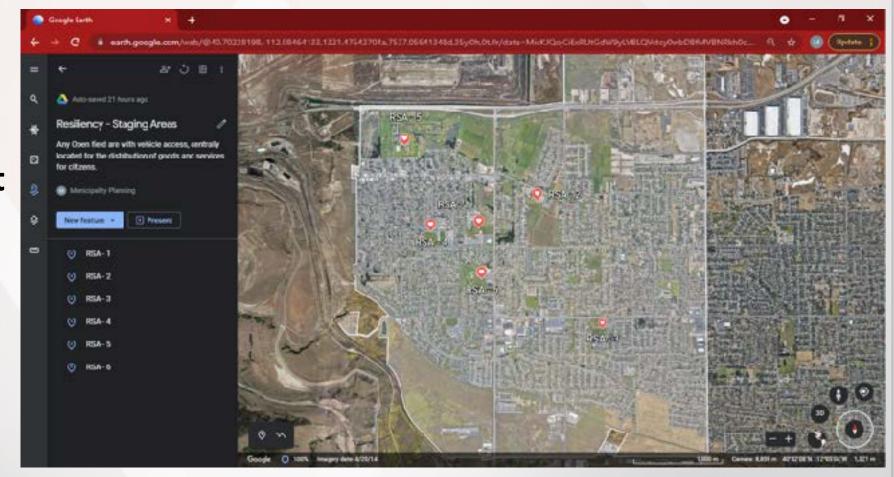
Locations where the public might have access to free **Digital** Infrastructure hardware such as computers or software such as internet access





Map Resiliency Infrastructure: Staging Areas

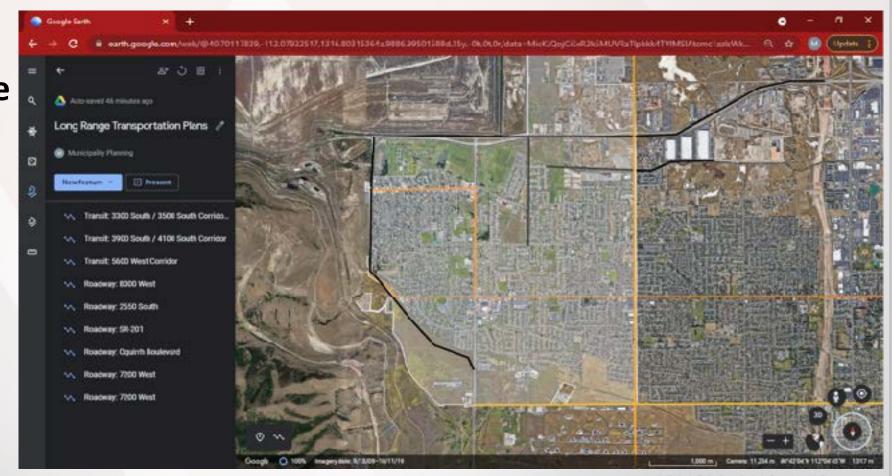
Open areas such as grass fields with vehicle access, centrally located, that can be used for the distribution of goods and services for citizens.

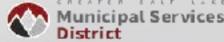




Map Resiliency Infrastructure: Long Range Road Infrastructure and Public Transportation Plans

Transportation plans have likely been made by a variety of planning entities.





Map Resiliency Infrastructure: Multi-Modal Transportation Plans

Transportation plans bike and pedestrian travel.





Map Resiliency Infrastructure: Development Wish List from your Downtown Alliance...

Or maybe map public comments received...

Whatever issues that are confronting your community





Plan with Context | Store Conversations | Solidify Ideas

This tool can especially become a planning white board for your council or community. Easily add and remove ideas and proposals so that your planning board can evolve with the context or your community.



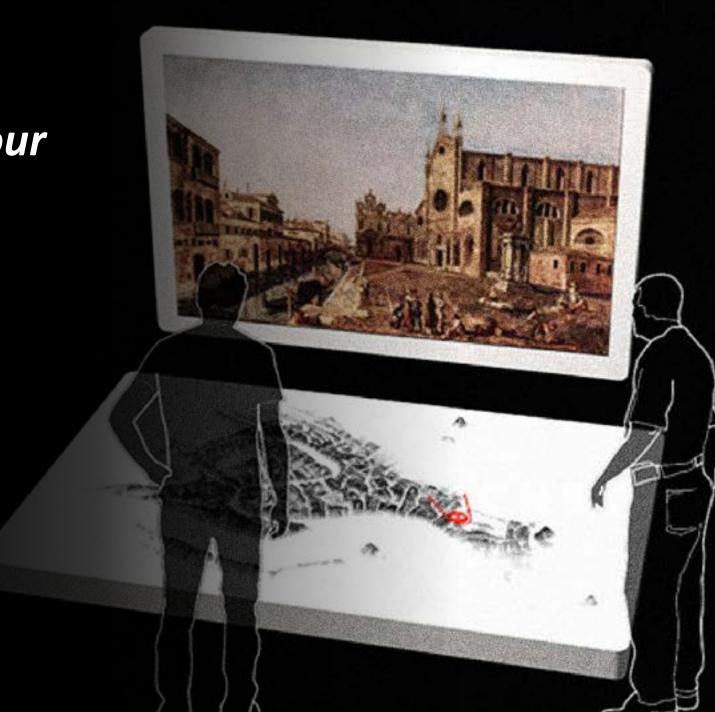
Issue considered on an island



Issue considered within the general thrust of the planning context

Make the tool work for *Your*Community

- Open the project during planning discussions and meetings
 - Share a screen in a webhosted meeting or project a screen in physical meeting
 - Fly around the area
 - Compare with other planning efforts
 - Make notes
- Share the project with anyone!



Thank you for your time!

Please reach out to the Greater Salt Lake Municipal Services District for additional information on the Planning Strategies and Tools presented today.

*Special acknowledgements to the Kearns General Plan Steering Committee, Planning Commission, and Council, as well as our colleagues and community partners along the way.

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