City of Farmington
City Council Work Session Minutes
Tuesday, June 4, 2024

The City Council met in a Joint Work Session with the Planning Commission on Tuesday, June 4, 2024, at Farmington City Hall, 430 3rd Street, Farmington, Minnesota.

1. CALL TO ORDER

Mayor Hoyt called the Council Work Session to order, and Chair Rotty called the Planning Commission Work Session to order, at 4 pm.

Members Present: Mayor Joshua Hoyt
Councilmembers Holly Bernatz,
Katie Bernhjelm (arrived at 4:03 pm), Nick Lien, and Steve Wilson

Members Absent: None

Staff Present:
Lynn Gorski, City Administrator
Julie Flaten, Asst City Administrator/HR Director
Leah Koch, City Attorney
Deanna Kuennen, Community & Economic Development Director
Tony Wippler, Planning Manager
Kellee Omlid, Parks & Recreation Director
John Powell, Public Works Director
Shirley Buecksler, City Clerk

Also Present:
Planning Commission:
Chair Dirk Rotty
Commissioners LeeAnn Lehto, Mitch Snobeck, Krista Tesky, and Phil Windschitl

Tract Team:
Kristin Dean, Director of Entitlements
Kevin Arrow, Vice President, Land Development
Phillip Sandino, Senior Vice President, Utility Development
Keely Ambrose, Corporate Counsel – Entitlements
Jess Walker, Development Manager

Kimley-Horn: Alan Catchpool and Ashley Payne

2. APPROVE AGENDA

Motion was made by Councilmember Wilson and seconded by Councilmember Bernatz to approve the agenda, as presented. The Planning Commission also approved the agenda, as presented.

Motion carried: 10 ayes / 0 nays

3. DISCUSSION ITEMS

3.1 Introduction – Tract, Data Center Development Team

A recent rezoning application has generated interest and questions about a proposed development on the south side of Farmington. The purpose of this meeting is to provide information about Tract, why this Farmington site, and address concerns that have been expressed. The intent is to provide factual information and answer questions that the City Council and Planning Commission have regarding the proposed development and identify a process moving forward that includes public access to more detailed site development information and provides more opportunities to engage with the development team.

Topics addressed:

1. Introduction of the Tract Team
2. Data Center Overview
3. Why Farmington
4. Infrastructure Needs
5. Noise and Traffic
6. Job Creation
7. Economic and Community Benefits
8. Sustainability
9. Next Steps

City Council asked questions and received answers. Introduction and discussion only, no direction.

4. COUNCIL COMMITTEE UPDATE

No update.

5. CITY ADMINISTRATOR UPDATE

No update.

6. ADJOURNMENT

Motion was made by Councilmember Bernatz and seconded by Councilmember Lien, and motioned by Commissioner Tesky and seconded by Commissioner Windschitl to adjourn the meeting at 5:45 p.m.

Motion carried: 10 ayes / 0 nays

Respectfully submitted,

Shirley R Buecksler
City Clerk


Farmington, MN
Joint Work Session with Planning Commission & City Council
June 4, 2024
tract

tract

Who We Are

Tract is the trusted partner for planning responsible technology infrastructure.

We create opportunities that bring economic development to communities

Blenheim Project – Hanover County, VA

What We Do

Tract Business Model: Acquire raw land, create shovel-ready data center sites via, zoning, horizontal investment and infrastructure positioning

We are reliant upon positive and cooperative relationships within the communities where we work. We are committed to developing these relationships and accountable to maintaining them for the long term.

Access to Capital: We are well positioned to make capital commitments to our project sites and the communities where we develop.

Value Proposition (Communities): Thoughtful Master Planned approach

Value Proposition (End User): Speed and Certainty

Leadership

Grant van Rooyen
Chief Executive Officer

Graham Williams
Chief Investment Officer

Heidi Diemar
Chief Business Officer

Todd Stockard
Chief Financial Officer

Nat Sahlstrom
Chief Energy Officer

Jessica Bennett
Chief Legal Officer

Matt Spencer
Chief Technical Officer

Jeff Cox
Chief Innovation Officer

Community Impact

When part of a thoughtful land use plan, data centers are good neighbors.

01

Proper Planning

When cities master plan growth, data centers, along with other critical infrastructure (i.e., airports), are best located away from residential centers.

02

Good Neighbors

New data center builds are aesthetically pleasing, and generate minimal traffic, noise, or light pollution.

03

Community Partner with Positive Economic Benefits

Data center companies are actively engaged in the local community, investing millions in education, parks, and critical infrastructure.

04

Stewardship

Major data center operators have among the most aggressive climate targets globally.

Net Zero by 2030

Farmington Tract Team

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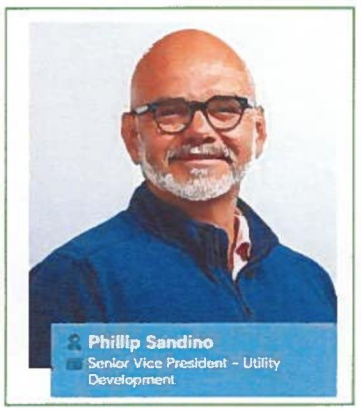

Local Consultant Team

Kimley»Horn

Expect More. Experience Better.

Alan Catchpool, PE
Ashley Payne

What We Do

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Site Acquisition

- Deep experience architecting / siting networks and data center platforms
- Long-term orientation and focus to masterplan scale and efficiency
- Secure water rights and infrastructure

Power Procurement

- Advance generation and transmission planning
- Contract transmission upgrades and substation builds
- Exclusive renewable energy PPAs and behind-the-meter solutions

Entitlements

- Master plan and appropriate zoning approvals are achieved through partnership with local jurisdiction
- Development agreements and other necessary approvals are finalized that set the course for continued development of the site.

Construction Development

- Site grading and preparation
- Power, fiber, water extensions where needed
- Public and private access and easement master-planning

What We Have Accomplished

tract

Active Markets

- Currently in over 10 markets across the US

Entitlements

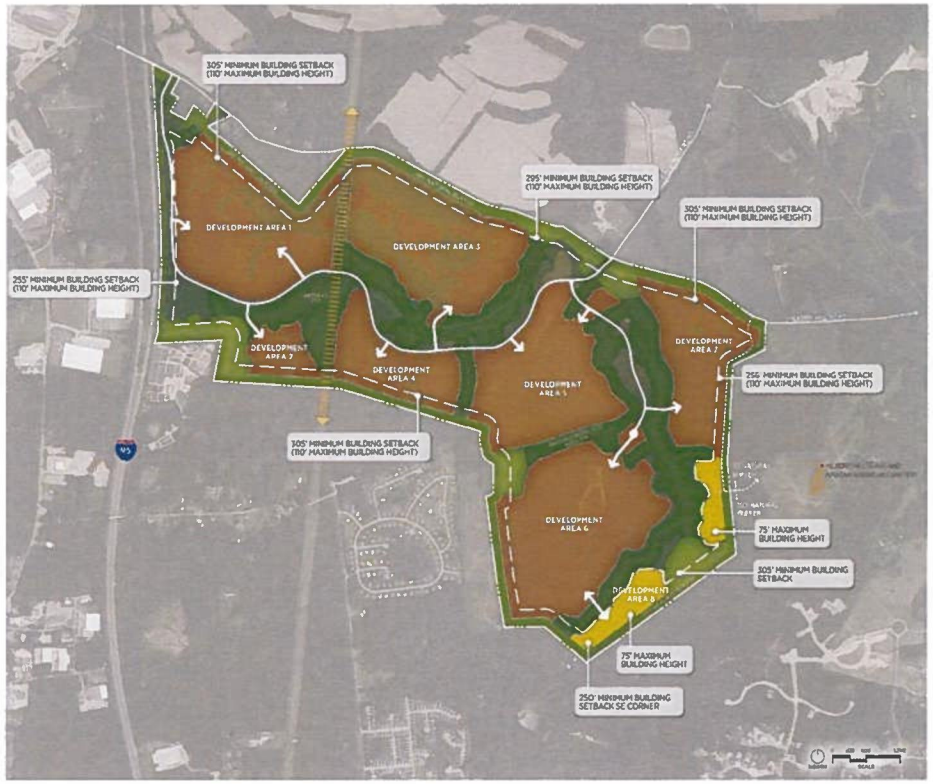
- Successful approvals in multiple jurisdictions

Construction Development

- Breaking ground on multiple projects

HANOVER BLENHEIM
CONCEPTUAL BUBBLE PLAN
MARCH 2024

- DEVELOPMENT AREAS
- NATURAL BUFFER
- RESOURCE PROTECTION AREAS (RPA)
- WETLANDS
- EXISTING TRANSMISSION LINES & EASEMENT



OPEN SPACE DATA TABLE		
Type	Acres	% of Site
Natural Buffer	165.4	14
Greenbelt	5.9	0.5
Open Space in RPA	203.8	17
Open Space	77.6	6
TOTAL	452.5 Acres	37%

tract NORRIS DESIGN

Why We're in Farmington, MN

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Power

- Existing 345kV on property
- Positive relationship with GRE and Dakota Energy

Site

- Adequate Site Access
- Availability of water
- Positive environmental qualities

Connectivity

- Important Site that fits architecturally into overall data network

Local Economy

- Emerging data center market in Minnesota
- Excited to bring economic benefits to Farmington

Why are we Here Tonight

- Following City's Rezoning Process
- Heard concerns and questions expressed at the May 14 PC Hearing
- Re-assessed process with Staff
- PUD process allows us to present more information up front and have more robust engagement with the community

Farmington Site Location

- Two Sites (348 ac):
  - Fountain Valley Golf Club & Farmington Public Schools
- Total Developable Area: 205 ac (59%)
- Access from 220th / MN 50, 225th St. & Biscayne Ave.
- Existing power line south of the site

Processes

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Rezoning **+ PUD Overlay**

- Development Standards
  - Building Setbacks
  - Height
  - Parking
  - Landscaping
- Development Areas
- General Access locations
- General Utility Layout
- Street Standards
- Identification of Environmental Features

Preliminary and Final Plat

- Establishes lot boundaries
- Location and types of streets
- Location and size of sewer lines and water mains
- ROW dedication
- Easements
- Traffic

Alternative Urban Areawide Review (AUAR)

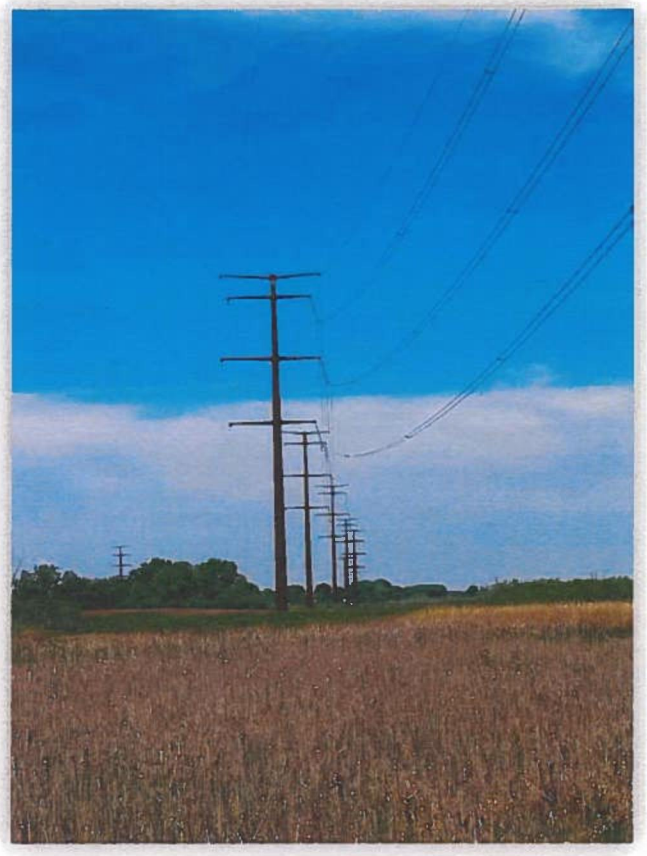
- Environmental review process
- Fish, wildlife, and ecologically sensitive resources
- Physical impacts on water resources
- Water Use
- Water Quality-Wastewater
- Impact on infrastructure and public services
- Erosion and sedimentation
- Geologic hazards and soil conditions
- Traffic
- Archeological, historic, and architectural resources.
- Mitigation Plans

What we have heard

- Concerns & Questions about:
  - Location
  - Noise
  - Traffic
  - Water use
  - Power
- Tax Generation
- Sustainability
- Alternative uses
- Broader community benefits
- Need more information

Power

- Site is ideally suited with the 345kV line + planned infrastructure upgrades.
- Tract is engaged with Great River Energy & Dakota Electric Association ("Utilities")
  - Proceeding with Service Application and engineering studies to interconnect to the grid.
- Site is located at the eastern and southern edges of Farmington.

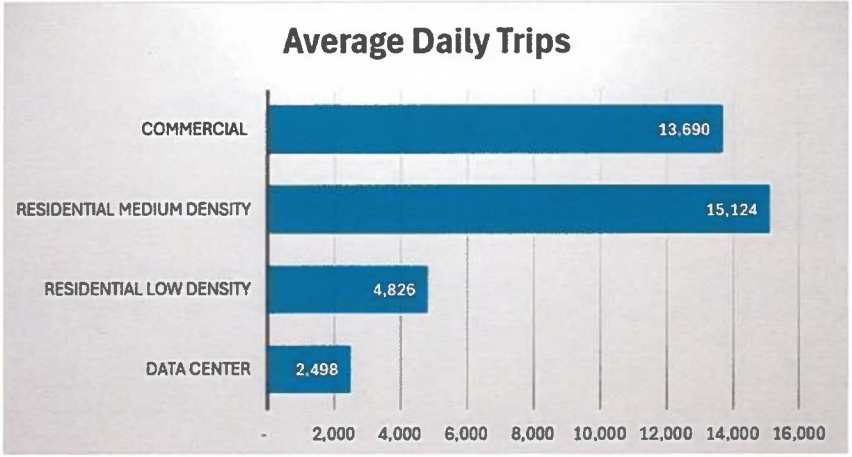


Traffic

- Traffic Impact Study Completed April 2024

Average Daily Trips
- At full build-out, campus will generate 273 Employees
- 2,498 Average Daily Trips projected

Road Improvements
- MN 50 – Eastbound right and Westbound left turn lanes.
- MN 3 & 225th St. – Northbound right and Southbound left turn lanes.
- Optimize signal timing at adjacent intersections.



Water and Wastewater

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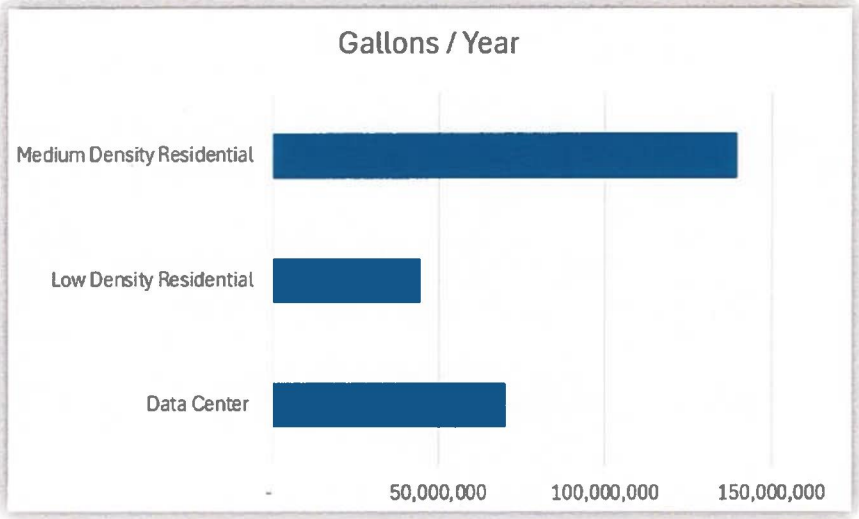
Water and Wastewater Use

- Taking advantage of Minnesota's temperate climate, Tract is assuming that future DC developers will utilize Direct Evaporative Cooling (DEC)
- By using outside air that is pulled through a water saturated medium, DEC is the most cost-efficient way to cool a DC while using minimal water

System Infrastructure Impact

- Capital Improvement Plan (CIP) to support Comp Plan Update
- Campus water and sewer capacity to be included in CIP
- DC industry is motivated to utilize reclaimed water



Noise

- Noise is regulated by the Minnesota Pollution Control Agency (MPCA)
- Residential (NAC 1): 60 -65 dBA daytime / 50-55 dBA nighttime
- Data Centers are categorized as NAC – 3
  - Noise from data centers cannot create noise that exceeds the dBA on adjacent residential property.
- Noise Studies

Table 1. Typical Sound Pressure Levels Associated with Common Noise Sources

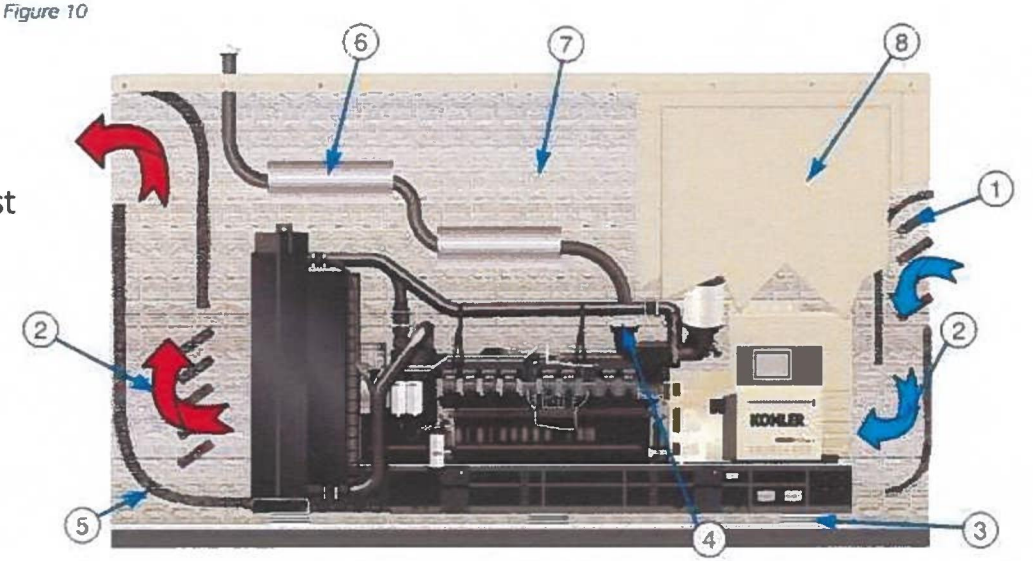
Sound Pressure Level (dBA)	Subjective Evaluation	Environment	
		Outdoor	Indoor
140	Deafening	Jet aircraft at 75 ft	
130	Threshold of pain	Jet aircraft at 300 ft during takeoff	
120	Threshold of feeling		Rock band concert
110	Extremely Loud	Accelerating motorcycle at a few feet away.	
100	Very Loud	Auto horn at 10 ft	
90		Jackhammer at 50 ft	Noisy factory
80	Loud	Diesel truck (40 mph) at 50 ft Noisy urban street	Cafeteria with sound-reflecting surfaces
70	Moderately Loud	Busy highway at 100 ft	Vacuum cleaner at 10 ft
60	Moderate		Face-to-face conversation
50	Quiet	Small town residence	Open office area
40			Quiet dishwasher
30	Very quiet		Bedroom, typical residence (without TV or sound system)
20		Rustling leaves	Audiometric testing room Whisper
10	Just audible		Human breathing
0	Threshold of hearing		

Source: Adapted from *Architectural Acoustics*, M. David Egan (1988) and *Noise Control in Buildings*, Cyril M. Harris, (1994).

On-Site Generators

- Noise Attenuation
  - Generator Enclosures
  - Exhaust Mufflers/Bellows
  - Noise Deadening Material
  - Louvers
- Air Permitting / Emissions
  - Strict emissions standards per the Clean Air Act must be met
  - All diesel generators require an EPA certified engine
  - Permit limitations on generator run time
  - EPA limits the following constituents as part of its emissions standards:
    - Non-methane hydrocarbons
    - Volatile Organic Compounds
    - Nitrogen Oxides (NOx)
    - Particulate Matter
    - Carbon Monoxide

Figure 10



SAMPLE DESIGN FEATURES TO ATTAIN LEVEL-3 SOUND ATTENUATION

1 - Sound attenuated louvers
2 - Ducted air redirected at right angles reduces noise
3 - Spring vibration isolators with rubber pads
4 - Flexible exhaust bellows
5 - Noise absorbent lining on ducting
6 - Secondary silencer
7 - Noise absorbent lining on internal siding
8 - Sheet metal enclosure

Sustainability

Tract: ESG policy / Collaboration Agreement with Silicon Ranch align advanced renewable projects with future Data Center development in Nevada and Utah

- Hyperscalers have Environmental, Social, & Governance ("ESG") goals to meet based on corporate policies which encourage companies to act responsibly.
- The data center industry is a major buyer of "Power Purchase Agreements" for renewable energy.
  - 2021: Amazon and Microsoft were the two largest corporate buyers of renewable energy in the world through PPA.
  - Meta : Operations for their DCs have already reached net zero emissions and are supported by 100% renewable energy
  - Google has a goal to run on 24/7 carbon-free energy on every grid where they operate by 2030.
- Microsoft, Google & Meta have a goal to replenish more water than they consume by 2030.

Job Creation

1. Data Center Operations (277 permanent jobs):
   - Network Engineers
   - Computer Programmers
   - Computer Support Specialists
   - Database Administrators
   - Computer Research Scientists
   - Security
   - HVAC

2. Construction Jobs:
   - Electricians
   - Mechanical Engineers
   - Utility Contractors
   - Plumbers
   - Steel Workers
   - Grading Contractor

3. Indirect Jobs : "For every job inside a Virginia data center, there are 3.5 additional jobs that are supported in the rest of the Virginia economy, not counting construction jobs."*

U.S Bureau of Labor Statistics		Entry Level Education	2022 Median Annual Wage
Computer & Information Research Scientist	Computer and information research scientists design innovative uses for new and existing computing technology.	Masters Degree	$137,000
Computer Network Architects	Computer network architects design and implement data communication networks, including local area networks (LANs), wide area networks (WANs), and intranets.	Bachlor's Degree	$127,000
Computer Programmers	Computer programmers write, modify, and test code and scripts that allow computer software and applications to function properly.	Bachlor's Degree	$97,800
Computer Support Specialists	Computer support specialists maintain computer networks and provide technical help to computer users.		$59,660
Computer Systems Analysts	Computer systems analysts study an organization's current computer systems and design ways to improve efficiency.	Bachlor's Degree	$102,240
Database Administrators & Architiects	Database administrators and architects create or organize systems to store and secure data.	Bachlor's Degree	$112,120
Information Security Analysts	Information security analysts plan and carry out security measures to protect an organization's computer networks and systems.	Bachlor's Degree	$112,000
Network & Computer Systems Administrators	Network and computer systems administrators install, configure, and maintain organizations' computer networks and systems.	Bachelor's Degree	$91,000

**The Impact of Data Centers on Virginia's State and Local Economies 5th Biennial Report (April 2024)– Northern Virginia Technology Council*

Positive Economic Impacts to City of Farmington

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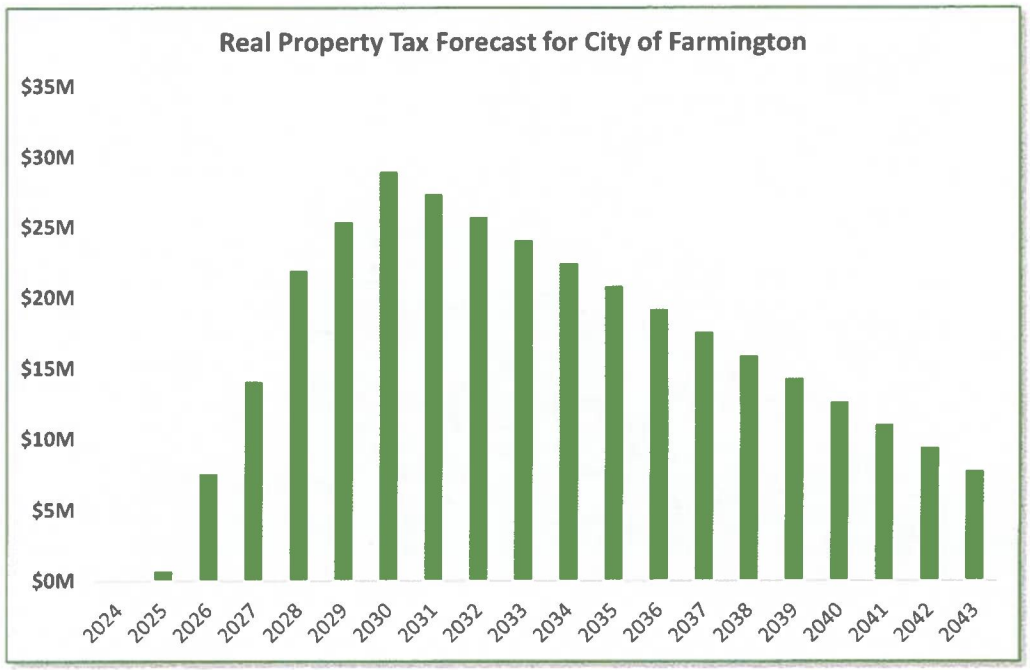
Total 20 Year Estimated Tax Receipts	**$ 325,000,000**
Average Annual Estimated Tax Receipts	**$ 16,000,000**
Max Annual Estimate Tax Receipts	**$ 29,000,000**



Examples for how funds can be allocated:

- Schools,
- Emergency services & First Responders
- Increased salaries and benefits for employees
- New parks & upgrades to existing parks
- Upgrades to water and sewer infrastructure.

Community Benefits

Hyperscalers are recognized as providing significant contributions towards communities beyond tax generation:

- AWS: STEAM learning opportunities and pathways, partners with local educational organizations to connect the workforce with careers in data centers and technology
- Meta: Community Action Grants, STEM contributions, small business trainings
- Google: STEM grants, Skilled Trades and Readiness Program (STAR)
- Microsoft: $1.9B given to nonprofit organizations last year
- Tract
  - Storey County, NV: Exploring opportunities for community involvement such as sponsoring the County Middle and High School robotics team.
- Henrico County, VA: $60M Housing Trust Fund created from data center taxes.
- Louden County, VA: Reduced property taxes due to significant tax collection on data centers (2020 = $333M)

Designed by Freepik: www.freepik.com

Smart Development, Without Disruptive Growth

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High Fiscal Impact

- Expecting to grow to well over $16M annually of property tax receipts over 20 years
- Creating ~277 high quality permanent jobs over 20 years
  - Variety of positions accessible to Farmington residents
  - E.g. Electricians, HVAC techs, IT techs, engineers, security guards

Low Infrastructure Impact

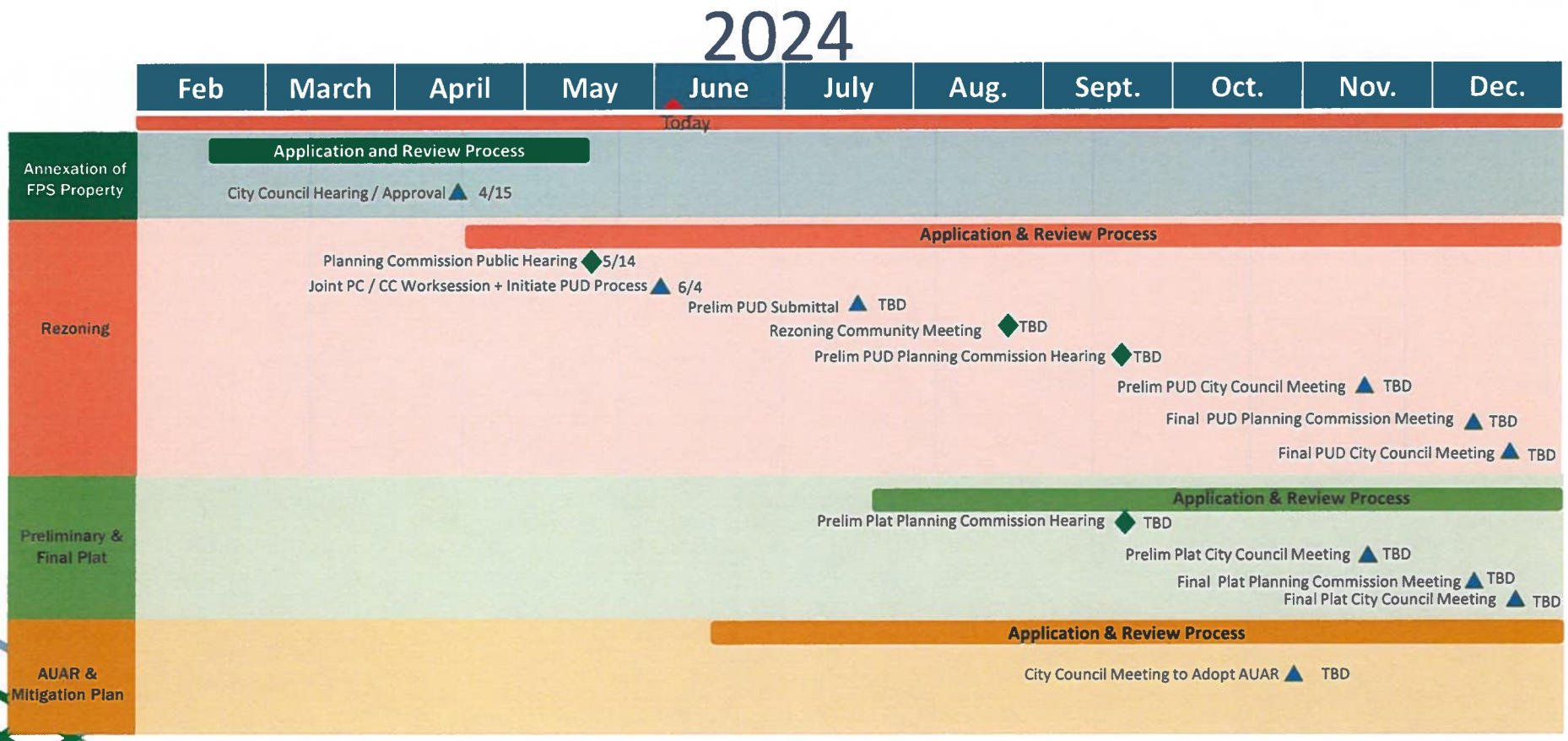
- Transmission lines adjacent to the site on the south side.
- Water use will be less than medium density residential on the site
- Partnering with City on area-wide infrastructure improvements

Traffic Impact

- Low traffic impact
- Traffic for data center use at full build-out will be less than what would be generated for commercial development, low-density or high-density residential development.

The Takeaway:	***This project presents a unique mix of high fiscal impact and low infrastructure and public services impact.***

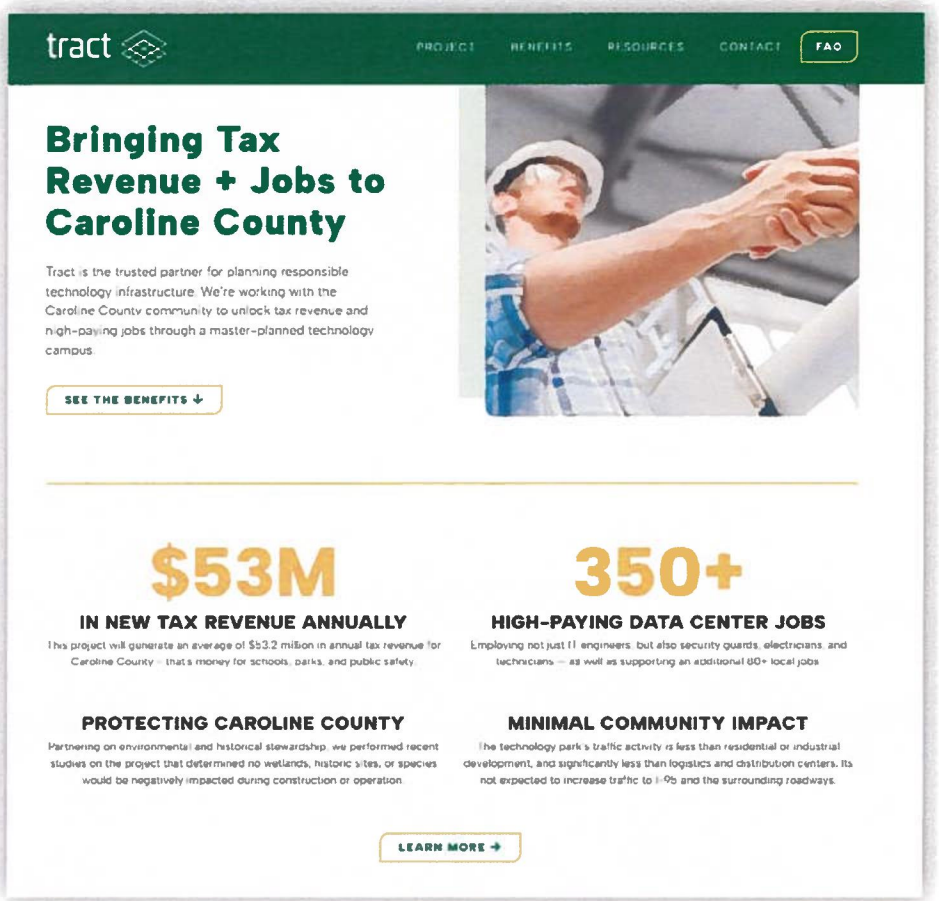
Schedule



◆ Opportunity for Public Comment

Project Website

- Launch Date: TBD
- Project Information
- Project Updates
- Timeline
- FAQs
- Contact Information




Thank you
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Potential Economic Benefits

Data Centers are economic drivers.

tract

Tier 3: Job Creation

- Each direct job associated with the project could see ~3 indirect jobs in the community. Supporting jobs like HVAC, maintenance, and others.
- Hundreds of additional construction jobs through the life of the project.

Tier 2: Indirect Tax Impact

- Taxes on sales / property with the data center supply chain
- Income tax on construction workers, data center operations staff, and individuals in the supply chain

Tier 1 Tax Generation

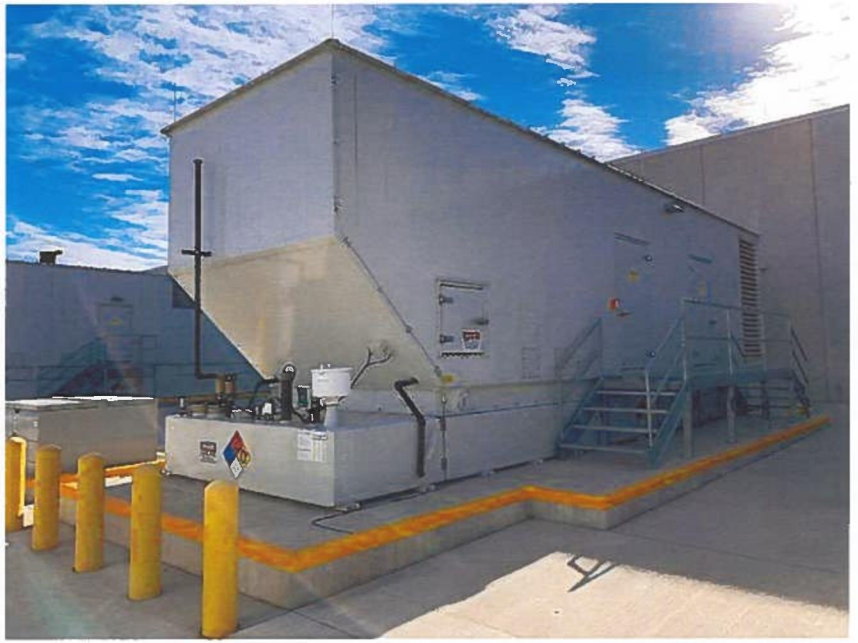
- Taxes paid directly by data center operators on investment including real estate, personal property, business license, utility, and sales tax on equipment

Other Questions

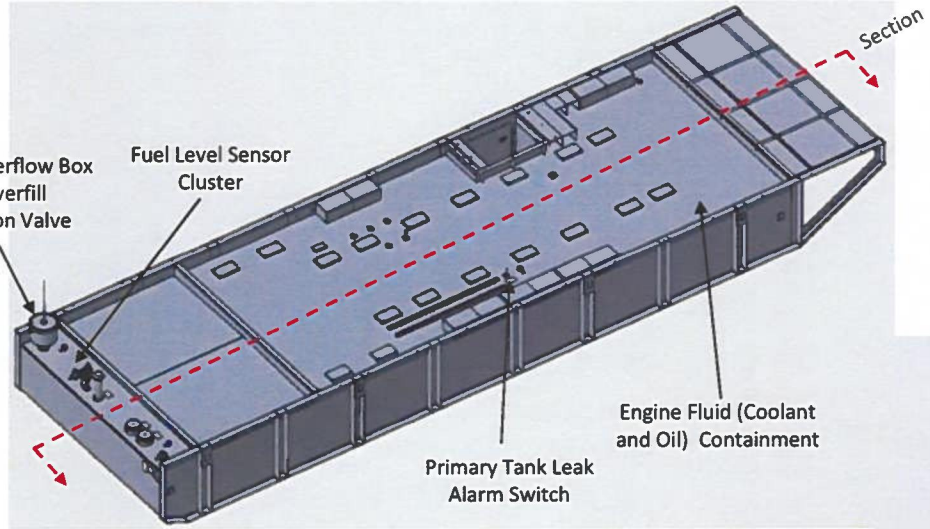
- Impact on property values
- Impact on parkland
- How is this different from other industrial development
- Impact on livelihoods
- Difference b/t private vs. commercial DCs.
- What happens if DCs not built? PUD will control that.

On-Site Generators

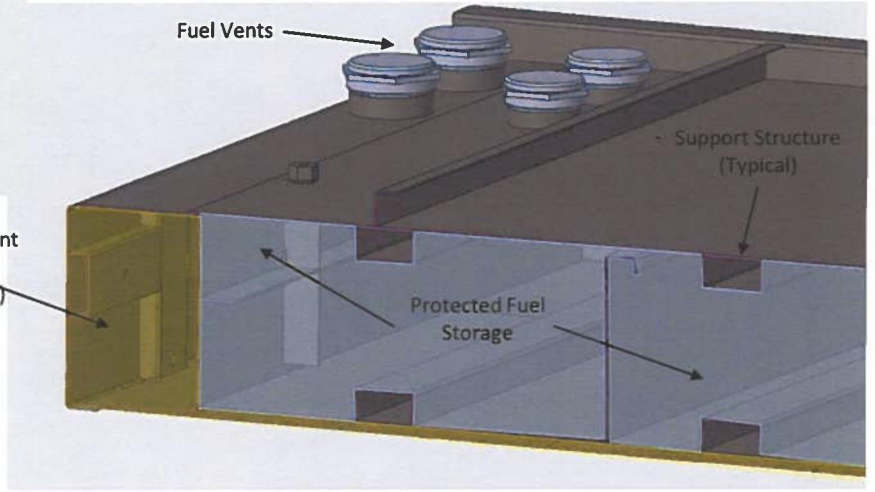
- Generators are used for back-up power
- 3MW generators are industry standard
- Fuel Storage
  - Fuel is stored in individual "Belly-Tanks" which are double-walled and monitored for leaks
  - Generators are protected on site through use of bollards and other traffic deconflicting measures
- Re-Fueling
  - Overfill Protection Valves
  - Fill port containment boxes
  - Spill Prevention, Control and Countermeasure (SPCC) plan must be in place at each facility
- Generator Testing
  - Industry Standard: 30 min/month @ 30% load
  - Industry is moving towards: 10 min/month unloaded with annual 30 min test at full load.



On-Site Generators



Typical Belly Tank Design



Typical Belly Tank Section

Why are data centers important?

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Data centers house critical infrastructure in our modern economy with customers across every industry and supply technologies we use everyday.

FIRST RESPONDERS

MEDICAL RECORDS

ONLINE BANKING

STREAMING

PHONE USE / SOCIAL MEDIA

SMALL BUSINESS

REMOTE WORK

SPORTS

NEWS

Cooling Systems

Indirect Evaporative Cooling (IDEC)

- Fluid-cooler utilizes water evaporation to cool air flowing through an external dan-driven air-to-water heat exchanger to remove heat from the data center and return chilled cooling to it. This is a "closed-loop" system that circulates cool air within and does not require potable water.
  - When outside air is cool enough, the fluid cooler will switch to dry mode, using no water at all.

Direct Evaporative Cooling (IDEC)

- Utilizes the direct evaporation of water to produce significant cooling and humidification with low energy consumption. Outside air is drawn through a wet medium. Water evaporates and delivers cool air into the data center.

Image by Freepik.com: Image by rorozoa on Freepik

Cooling Systems

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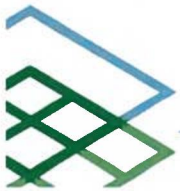
- **Direct-to-chip cooling:** Direct-to-chip cooling systems are among the most effective methods for cooling an entire server room because they cool the processors directly. This technique uses flexible tubes containing fluid that absorbs the heat and carries it away from the equipment.
- **Evaporative cooling:** Because evaporative cooling relies on the natural evaporation of water to cool an area, it is one of the most economical and environmentally friendly cooling processes. This method draws warm air across a wet filter or pad to absorb the heat, then redistributes the remaining cool air. Some evaporative cooling methods use water distributed from a misting system, which works well for data centers with humidity controls.



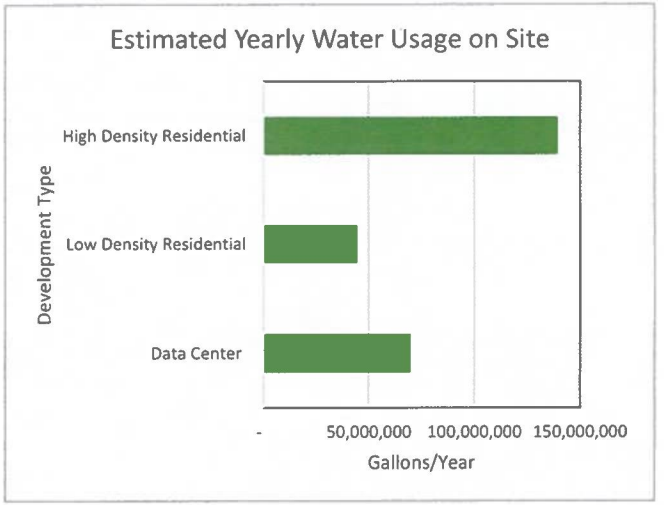
Water and Wastewater

Water and Wastewater Use

- Taking advantage of Minnesota's temperate climate, Tract is assuming that future DC developers will utilize Direct Evaporative Cooling (DEC)
- By using outside air that is pulled through a water saturated medium, DEC is the most cost-efficient way to cool a DC while using minimal water
- Estimates show that the water use to support DEC cooling on this site are below the water usage if the site was development as medium density residential

System Infrastructure Impact

- City is undertaking system-wide utility improvements and finalizing a Capital Improvement Plan (CIP) to support the 2040 Comp Plan Update
- Campus water and wastewater usage will be included in CIP and additional infrastructure will be constructed to support campus development
- City considering creating a reclaimed water system – reducing the need for domestic water to cool the DCs



Potential Economic Impact

Data Centers are economic drivers.

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Tier 4: Community Contributions

- Each direct job associated with the project could see as many as 3.5indirect jobs in the community. Supporting jobs like HVAC, maintenance, and others.
- Hundreds of additional construction jobs through the life of the project.

Tier 3: Job Creation

- Each direct job associated with the project could see as many as 3.5indirect jobs in the community. Supporting jobs like HVAC, maintenance, and others.
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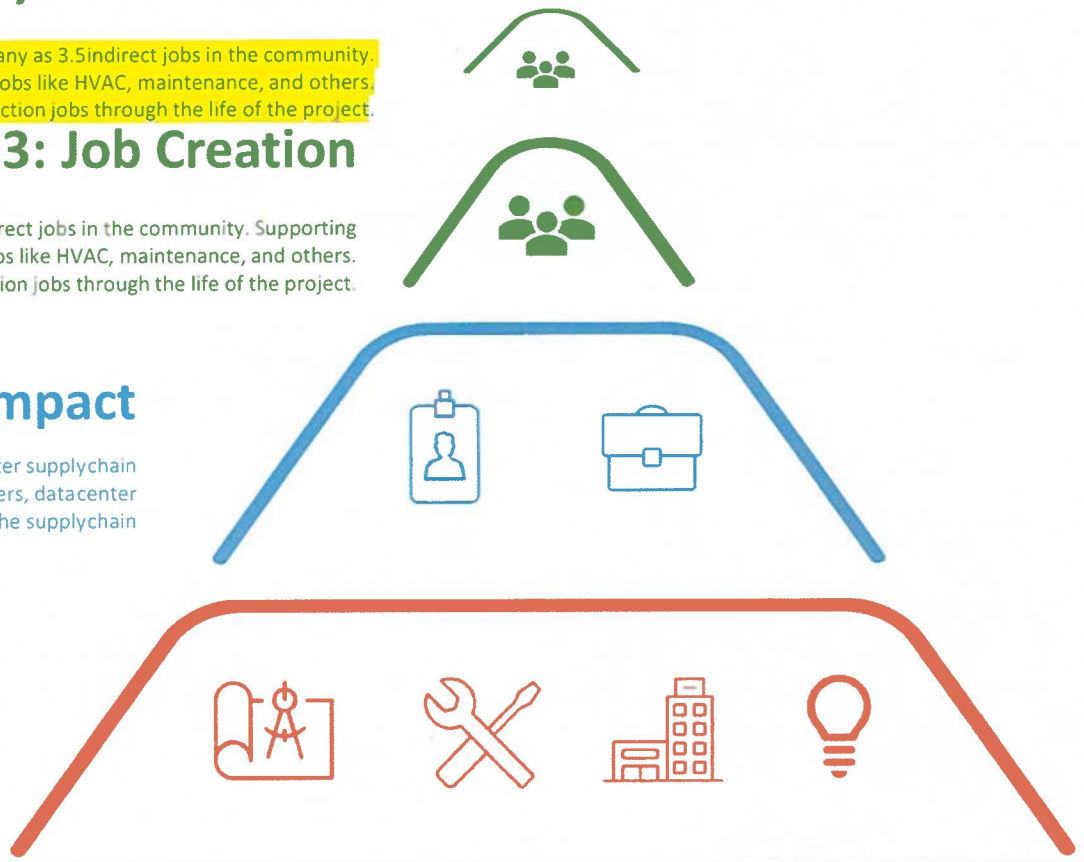
Tier 2: Indirect Tax Impact

- Taxes on sales / property with the data center supplychain
- Income tax on construction workers, datacenter operations staff, and individuals in the supplychain

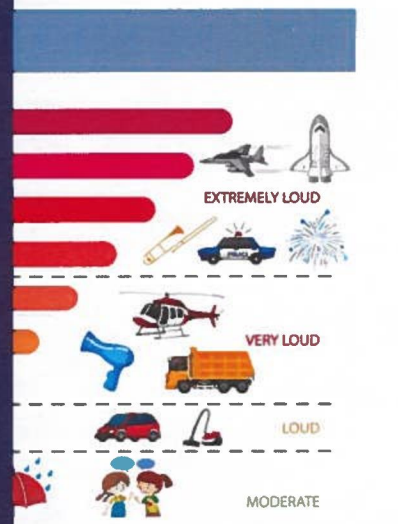
Tier 1 Tax Generation

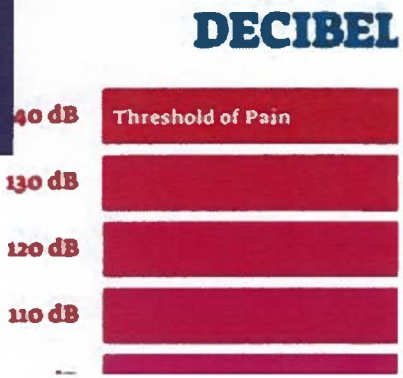
- Taxes paid directly by data center operators on investment including real estate, tangible property, business license, utility, and sales tax on equipment



Noise

- Noise is regula… Agency (MPCA
- For residential… dBA and L50 = … 10:00 p.m.) an… nighttime (10:…
- Data Centers a…
  - Noise fro… exceeds t…
- A noise study i…
- Noise generat… via:
  - Building,
  - Shielding … landscapi…
  - Silencers,
  - Vibration isolators
  - Equipment selection





Economic Impacts to Farmington Public Schools if Residential Built

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- Medium density residential development would cost the FPS district $3M to $5M /year.
- Data Center development will add 0 students and pose no impacts to the school district.
- The school district and the City will benefit from a positive tax contribution from data center development.