



City of Dallas

2024 Urban Heat Island Study Findings

**Parks Trails Environment
Committee
April 7, 2025**

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City of Dallas

Presentation Overview



- Purpose
- Findings
- Next Steps



Purpose



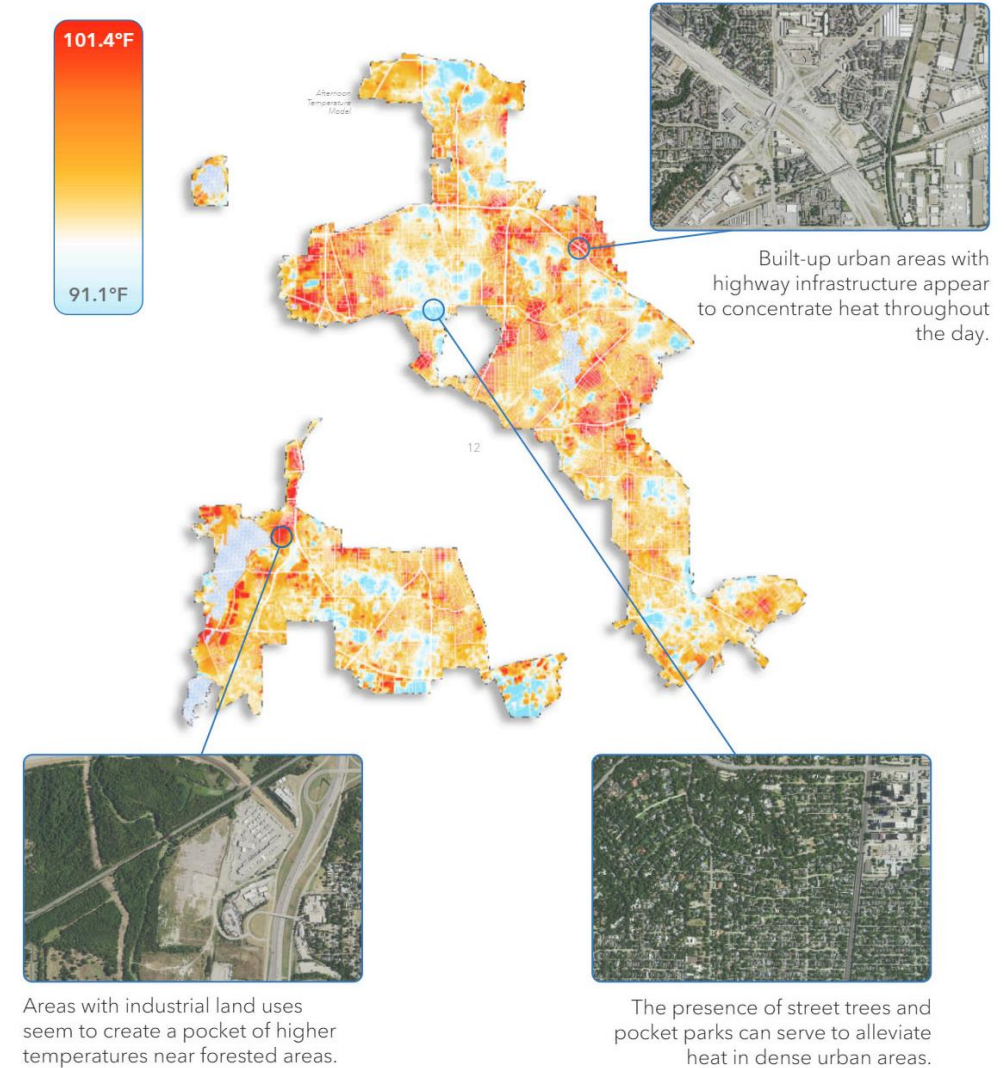
- Identify the hotspots in our city
- Prepare for extreme heat
- Look for equitable ways to implement cooling solutions in communities
- Advance CECAP goals (6, 7, 8) and targets
- Map 100% of the City of Dallas, about 350 square land miles



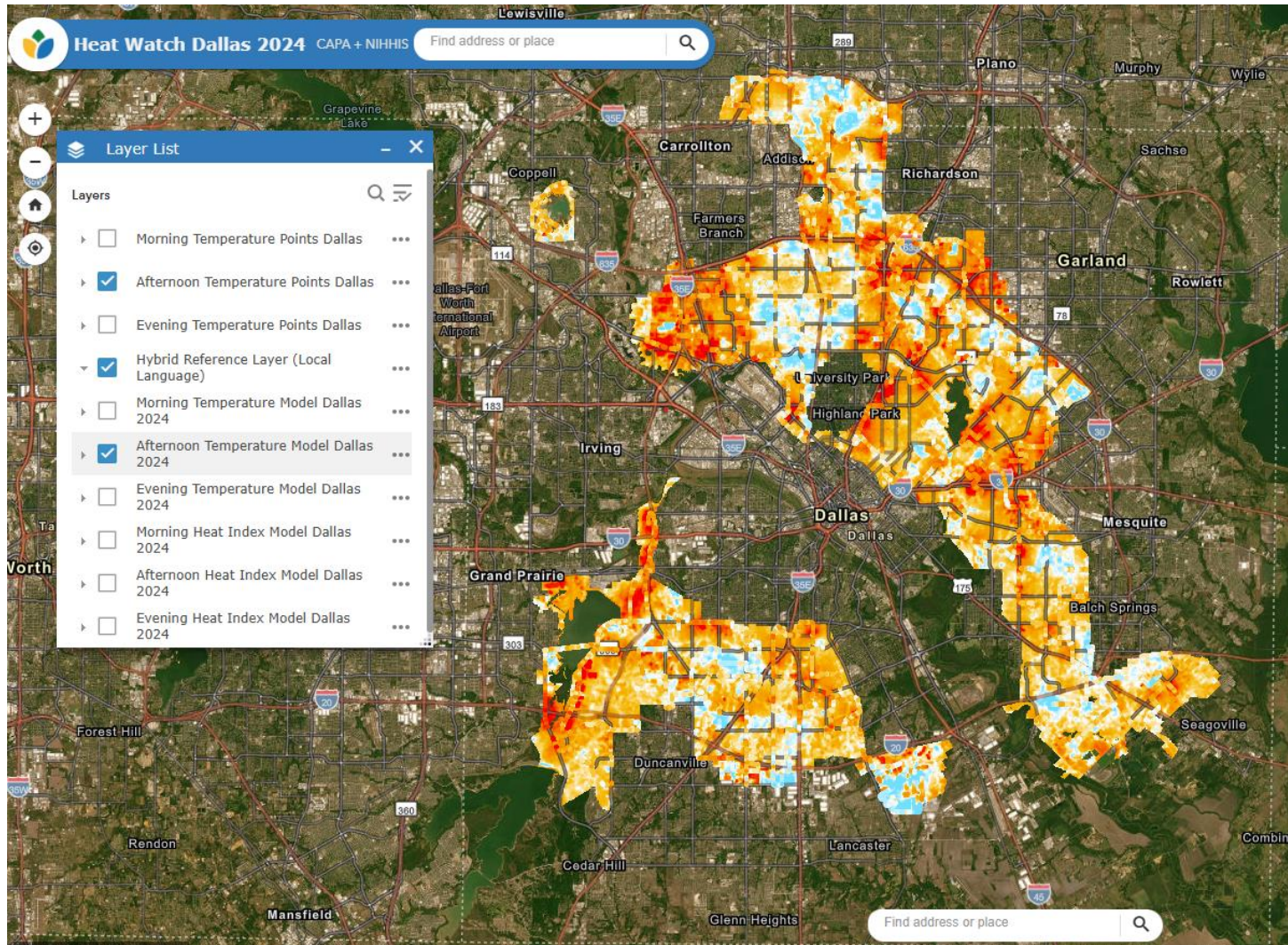
Initial Observations



- Built up urban areas with highway infrastructure appear to concentrate heat throughout the day
- Areas with industrial land uses seem to create a pocket of higher temperature near forested areas
- The presence of street trees and pocket parks can serve to alleviate heat in dense urban areas
- Max temperature differential: 12.0 F



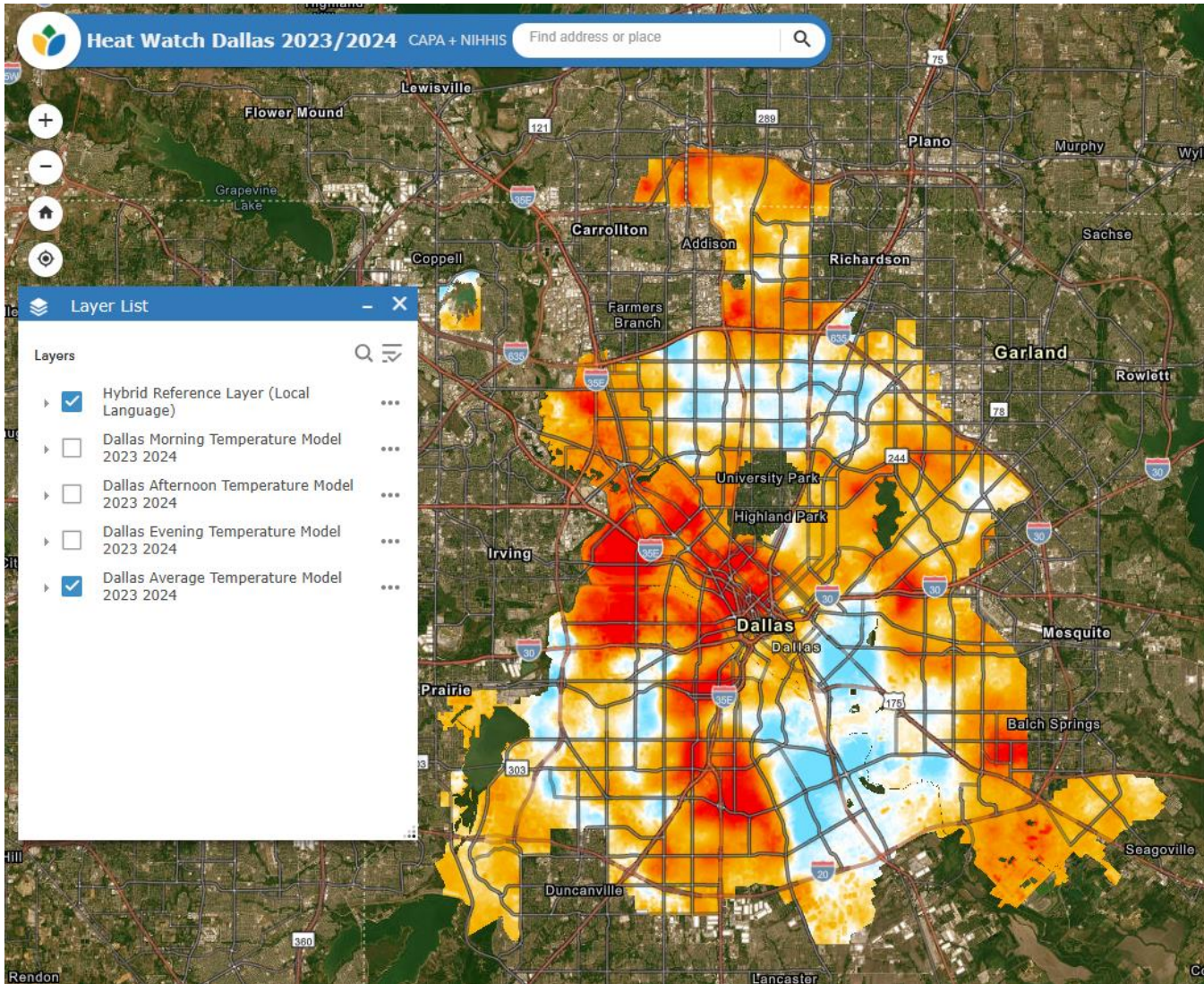
Interactive Map 2024



- Select temperature points and/or temperature model
- Select Morning, Afternoon, or Evening
- Can see exact measurements taken at any given point



2023-2024 Interactive Map



- Joint data sets 2023-2024 with adjustments to account for temperature differences
- Heat mostly concentrated in the northwest quadrant of the city, especially downtown and the surrounding industrial areas, and south along the I-35 corridor and surrounding neighborhoods.
- Cooler areas appear in southeast Dallas, especially along the Trinity River, Great Trinity Forest, and surrounding areas.
- OEQS will work with DBI to add council district layer to maps

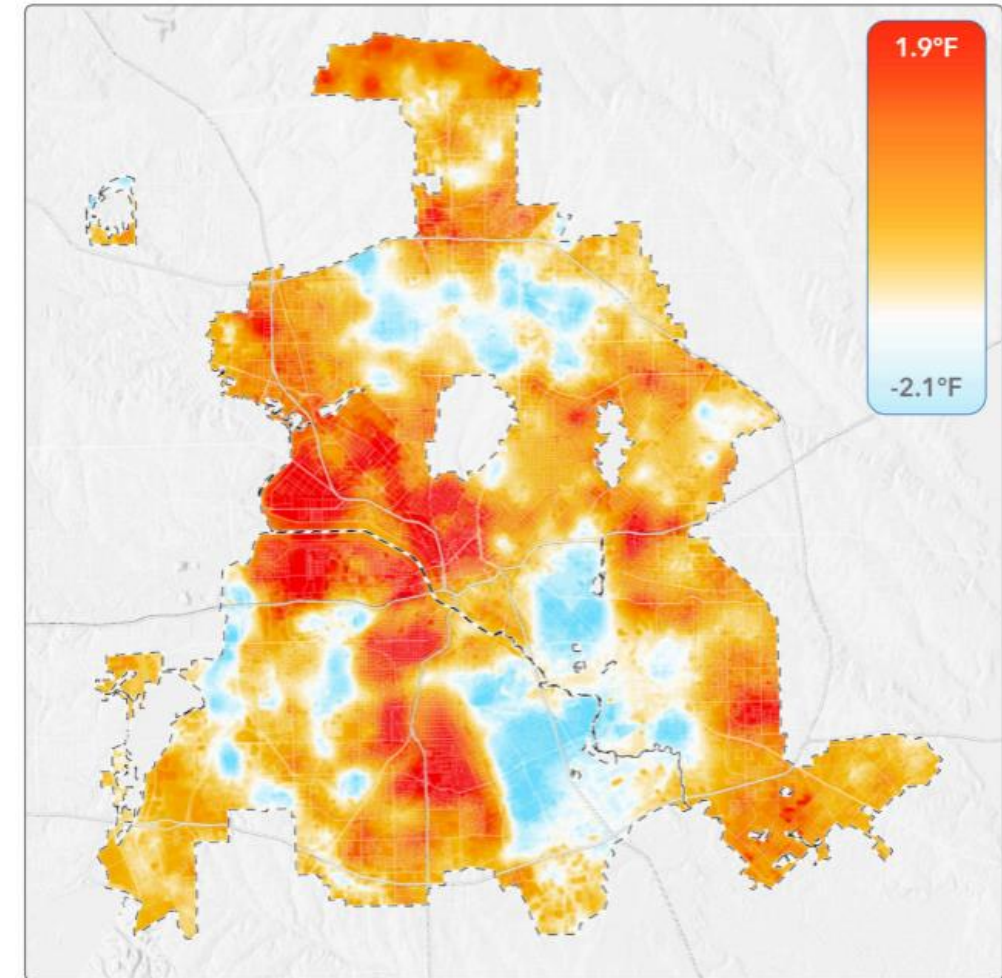


Hottest Areas in Dallas



- **D1, D4** Oak Cliff
 - Bishop Arts
 - South Oak Cliff/South Dallas
 - Glendale Park
 - Wynnewood Heights
- **D2** Lovefield West Residential
- **D2** Medical District
- **D5** Pleasant Wood (E Pleasant Grove @ Elam Rd and S Masters Dr.)
- **D6** West Dallas
 - Ledbetter gardens
 - Westmoreland Heights
 - Fredrick Douglas
 - Brookhollow Pid
- **D6** Gribble (I-635 & Royal Ln)
- **D7** Claremont Addition (I-30 N and South @ Hunnicut Rd)
- **D11** Preston Hills (I-635@ DNT)
- **D12** North Dallas
 - Old Mill Court
 - Near Timberglenn Park
 - Highlands
- **D14** Oak Lawn
- **D14** Harwood
- **D14** Downtown

Figure 3. Normalized 2023/2024 average Heat Watch raster



Next Steps



- Share findings with COD departments
 - PKR
 - Recommend using data in tree planting strategies
 - OEM
 - Recommend use of UHI data in development of heat action plan
 - Recommend identifying cooling relief shelters in priority areas
 - Office of Homeless Solutions
 - Recommend use of data for Inclement Weather Centers
 - Dallas Fire & Rescue
 - Recommend use of data for heat response plan
 - Public Works
 - Recommend use of data in planning and development
- OEQS to continue weatherization projects to increase energy efficiency of homes (Budget dependent)
- OEQS and Planning and Urban Design continued partnership with Smart Surfaces Coalition
- UHI outreach and speaking engagements





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