TUPP Uses GIS to Expand Secondhand Smoke Protections at Parks in Three Cities

The Tobacco Use Prevention Program (TUPP) of the Orange County Health Care Agency (OCHCA), in partnership with community partners such as Magnolia Park Resource Center and Westminster High School has been actively working to expand protections from secondhand smoke in parks across Garden Grove, Westminster, and Cypress.

The objective in TUPP's workplan states that by December 2025, "At least three jurisdictions in Orange County (i.e., Westminster, Garden Grove, and Cypress) will adopt and implement a policy eliminating smoking on the premises of outdoor recreational facilities and venues including their parking lots (e.g., amusement parks, beaches, fairgrounds, parks, parades, piers, playgrounds, sporting venues, tot lots, zoos)." TUPP staff have participated in a variety of intervention and evaluation activities to address this objective such as educational presentations, observation surveys, and tobacco litter cleanups.

Since the beginning of the project in January 2022, TUPP is utilizing Geographic Information Systems (GIS) mapping solutions to inform project interventions. All parks, schools, and youth centers were mapped in each of the three target jurisdictions. Schools that were within a one-fourth mile distance from the parks were identified for possible youth engagement as these parks were accessible to youth without the need for mobile transportation. Youth engagement was an important aspect of this objective as recruiting them to participate in the different project activities allows them to have ownership in what goes on in their communities. Park maps were also available during field data collection to map out routes for efficient data collection. Data from the baseline observation survey were then added to the maps.

This strategic approach allowed TUPP to prioritize schools based on their proximity to parks. Since transportation is not necessary, these parks are more likely to be frequented by students. A presentation on the benefits of smokefree parks, supported by the information featured on these maps, were provided to students at Westminster High School. Resulting from TUPP's existing relationship with Westminster High School through a prior project and the school being in an intervention area, it was identified as a targeted project. This presentation peaked student's interest and after the presentations, they took initiative to start a smoke free parks club on their campus.

As a result, a smokefree parks club was created at Westminster High School in September 2023. Currently, around twenty students participate in the club monthly. During the first park clean-up at Buckingham Park in March 2024, forty-four students participated alongside TUPP staff and picked up 382 cigarette butts. These park clean-ups not only help to support tobacco-free environments in places where students gather, but also encourage healthy behaviors and lifestyles by eliminating the presence of tobacco which are long term outcomes of smokefree parks.

In Garden Grove, a similar approach facilitated a park clean-up at Magnolia Park in November 2023 in partnership with 25 youth and parents from the Magnolia Park Family Resource Center. The map identified Magnolia Park as one of the parks with evidence of tobacco. Evidence of tobacco includes tobacco product waste (TPW), observed active smoking, and secondhand smoke. This data was gathered from a baseline observation survey carried out in all city parks by TUPP staff in April 2022.

Additionally, exploratory analysis was carried out using the Healthy Places Index (HPI) score and TPW data collected from the baseline observation survey. The HPI Score is a numerical score that quantifies a community's overall health-promoting conditions, with higher values indicating better community conditions. The HPI scores were overlayed with the baseline TPW data on the maps. The exploratory analysis and a secondary finding showed that the distribution of parks was higher in areas with higher HPI scores in all three jurisdictions. Thus, visually highlighting that people living in areas with lower quality conditions also have fewer parks available to them. All residents have a right to access parks that are smokefree, no matter where one lives, so it is important to highlight the distribution of parks.

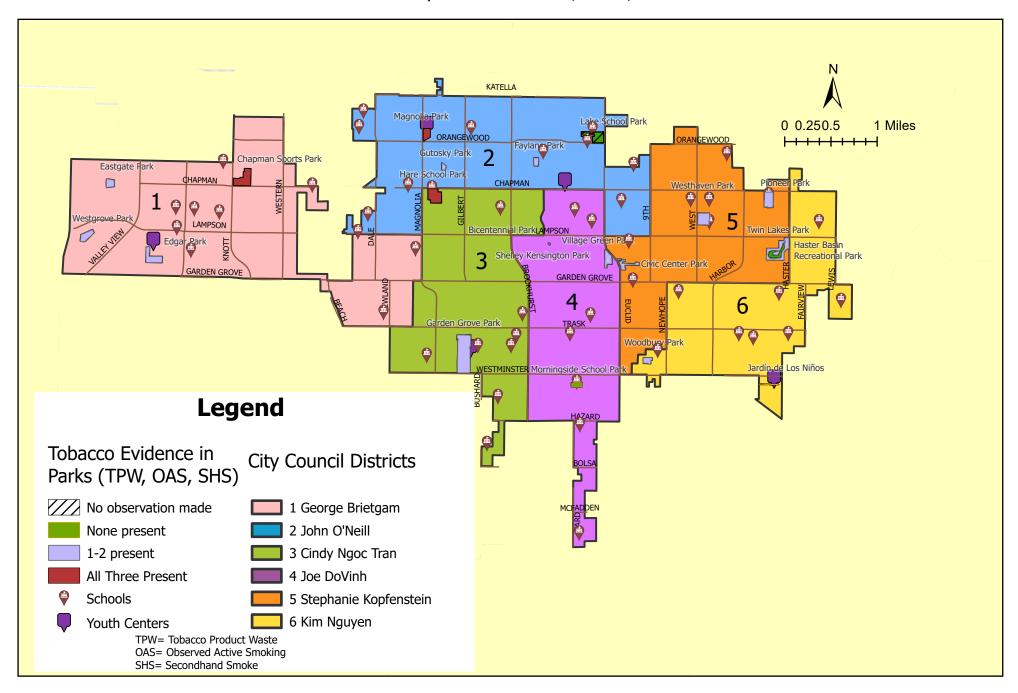
Recently, city council districts also were added to the map, along with the parks, schools, youth centers, and TPW indicators. These map visualizations are now being used by residents to help them write letters to their city leaders. In the letters, the residents pointed to the evidence of tobacco found in the parks to share the problem of TPW and explain to their leaders the benefits of having smokefree parks in their communities.

While the focus has primarily been on Garden Grove and Westminster, plans are underway to extend mapping efforts to include Cypress.

In summary, the project has been guided by geographic data insights derived from mapping since the inception of the project in 2022, while fostering community partnerships. TUPP is planning to carry out the GIS-driven follow-up observation survey in fall 2024 to further assess the impact of these interventions.

Smokefree Parks Project Cypress Parks and Schools Crescent Mackay Park Forest Lawn Cypress Park Memorial Park Cemetery 0 0.25 0.5 1 Miles LINCOLI BLOOMFIEL Lincoln Av Rosen/Acacia Evergreen Park Park Cypress College Oak Knôlíe Willow Park Parke Ave ORANGE Pinewood Park Veterans Park Darrell Nature Park Essex Park Bell Damron Park Myra Ave Laurel Park Marion Ave Marion Ave Cedai Glen Park **CERRITOS** Vessels Park Ferne Ave Baroldi/Sycamore Los Alamitos Hotline KATELLA Katella Ave **Legend**Tobacco Evidence (TPW, OAS, SHS) Maple Stanton Sta Grove Park No observations made Hettinga/ North Eucalyptus Manzanita Park None present Park **WORANGEWOOD** 1-2 present e Sea Peppertree Maple Park TPW= Tobacco Product Waste Grove Park South Schools OAS= Observed Active Smoking SHS= Secondband Smoking

Smokefree Parks Project Garden Grove City Council Districts, Parks, and Schools



Smokefree Parks Project Westminster City Council Districts, Parks, and Schools

