Subject: 15 minute city
Date: Monday, February 12, 2024 at 4:59:25 PM Pacific Standard Time
From: carol eber
To: Christina Paul

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
Regarding the idea of a 15 minute city, I took a look at my most common destinations. While I appreciate the goal, I think we must one grounded in reality. So here are my current walking times:

- Grocery store - 10 minutes
- Village Network- 20 minutes
- SMART station - 18 minutes
- Hair salon - 50 minutes
- Doctor - 60 minutes
- Pharmacy - 60 minutes

So what are your strategies for ensuring that I walk 15 minutes to my frequent destinations?

Carol Eber
209 Kent Street, Petaluma, 94952
707-763-5741

Subject: Planning committee thoughts
Date: Wednesday, February 14, 2024 at 1:34:33 PM Pacific Standard Time
From: John Heebink
To: Christina Paul

To Ms. Paul and All Concerned,

The ideal of the 15 min city is more than worthy: it's a wonderfully humane and sensible goal! I'd love to see our town move more in that direction in the coming years.

But additionally, I hope to see a carrot and stick approach to the homeless: providing free care and job counseling--but balanced by consequences for illegal, destructive or anti-social actions. Such consequences as the removal of personal belongings, short of tents, especially if they were stolen or are strewn around.

We should avoid making long-term homelessness a viable choice for people by making it progressively more uncomfortable for those who steadily refuse help AND worsen the lives of others in the broader community--even if it risks accusations of harassment.

Where everything is tolerated, only the very rich live well. We see in San Francisco a sad and sickening preview of the societal dysfunction that could be fostered *here,* as well, by too-tolerant ways of addressing homelessness, sustained over years.

Thanks for this opportunity to get my two cents in.

John Heebink
Occasional Nextdoor.com user,
Petaluma resident of seven years, former SF resident

Subject: Public Comment for GPAC 2/15/24
Date: Wednesday, February 14, 2024 at 8:23:23 AM Pacific Standard Time
From: Charles Stark
To: Christina Paul

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
Hello Christina,

I hope you are having a good week. Below is a comment I would like to submit for the GPAC meeting on 2/15/24. I would also like to watch the meeting via Zoom if possible, as I am currently out of state but am very interested in following this process. Please let me know if there is a Zoom link available. My comment is as follows:

Hello,

I would like to begin by thanking the General Plan Advisory Committee for meeting with the community and taking public comments concerning land use and strategies for creating a more walkable city.

While creating a 15-minute city has the potential to increase accessibility to resources and services within the community, I'd like to bring attention to the physically disabled population of Petaluma and our needs when it comes to traversing the already existing sidewalks and crosswalks within the city. Many of the sidewalks have become crowded over the years with the installation of new traffic control measures (eg traffic lights), bus stops, signage, and natural elements meant to increase the city's beauty, like small trees and shrubbery; not to mention the signage and other displays associated with small businesses that take up sidewalk space in the downtown area. Additionally, many of the sidewalks near or in the downtown area are in dire need of maintenance or replacement as they are broken, crooked, or otherwise uneven and extremely difficult for physically disabled individuals to navigate. I bring these items to your attention so that these issues may be considered moving forward. It will be important to consider what efforts or protections will be in place to ensure that disabled individuals will also be able to utilize the new benefits associated with creating a more walkable city. Addressing these issues in future development will not only increase the ease of traversing the city for those with physical disabilities, it will also foster a more prepared community when it comes to disaster and emergency response. Individuals who use assistance devices such as canes, wheelchairs, or motorized scooters will be better equipped to evacuate areas in the event of fire or flooding so long as adequate measures are taken to consider and ensure our safety in new city developments.

I sincerely thank you for taking the time to read and consider this comment.
Signed,
Charles Stark

Wednesday, February 14, 2024 at 16:06:08 Pacific Standard Time

---

Subject: RE: GPAC
Date: Monday, February 12, 2024 at 4:14:55 PM Pacific Standard Time
From: wolpert@sonic.net
To: Christina Paul
CC: Brian Oh, Hines, Heather, Ron Whitmore, Heather Gurewitz
Attachments: image001.png

Greetings, Christina-

I received an email today from one of my heroes, architect Edward Mazria. He has a brief article on how modernism provided the design and planning tools to create better and healthier cities. Modern technology is allowing us to model theoretical conditions to create better planning and building performance. His article is entitled, ***"10 Transformative Principles for a Sustainable World".*** I found it enlightening to learn that of the Ten Principles - 5 in Planning and 5 in Architecture and Design – Petaluma already embraces many of them. But since we have been focused on Land Use, I think keeping the Big Picture in focus adds relevance to each step we take. One could skip to the end of the article and go directly to the 10 Principles.

If you would pass this on to the rest of GPAC, I would appreciate it.

-Bill Wolpert

GREEN BUILDING ARCHITECTS
William B. Wolpert, Architect
7 Fourth Street, Studio 61
Petaluma, CA 94952
707.789.0822
GreenBuildingArchitects.com

From: Mary Dooley <mary@madarc.com>
Sent: Thursday, February 22, 2024 7:21 PM
To: Christina Paul <cpaul@cityofpetaluma.org>; Hines, Heather <hhines@ci.petaluma.ca.us>; Ron Whitmore <ron@raimiassociates.com>; Brian Oh <boh@cityofpetaluma.org>; Heather Gurewitz <hgurewitz@cityofpetaluma.org>
Cc: Joshua Simmons <hello@joshsimmons.com>; Kris Rebillot <krebillot@rebillot.com>; Iliana Madrigal <ilianaimadrigal@gmail.com>; lizzie@lizziewallack.com; Daniel Harrison <dharrison@cityofpetaluma.org>; Wolpert Bill <wolpert@sonic.net>; Stephanie Blake <stephanie.blake@gmail.com>; Alden David <davealden53@comcast.net>; Bill Rinehart <bill@johnsonrinehart.com>; Erin Chmielewski <erin4wmh@gmail.com>; Hines, Heather <hhines@cityofpetaluma.org>; Roberto Mares <roberto.rosila@gmail.com>; Roger Leventhal <roger.leventhal@gmail.com>; Phil Boyle <pboyle1963@gmail.com>; brentjnewell@outlook.com; sharonkirk@gmail.com; Ali Gaylord <aligaylord@gmail.com>; Peggy Flynn <PFlynn@cityofpetaluma.org>; Yensi Jacobo <yensi@petalumapeople.org>
Subject: Re: What are Complete Neighborhoods and The 15 Minute City/

Dear GPAC and All:

One more important document is attached. “Reimagining Petaluma” was prepared by the SDAT - Sustainable Design Assistance Team sponsored by the AIA. This was a Charette process meaning the depth of study is limited but the expertise was at a very high level. The public comment last session suggested that the Economic expert was absent. He was not present in town, but made contributions to the document starting on page 48.

On page 24, the 15 minute city is introduced and this document provides graphics that some of our GPAC members suggested would help the conversation and visualization of the future.

Please include this in the public record.

Mary Dooley

https://www.paperturn-view.com/us/bergmeyer/2022-aia-communities-by-design-reimagining-petaluma-sdat?pid=Mjk292990&p=43&v=1.1

Mary Dooley AIA, Principal
MAD architecture inc.

707-765-9222

https://madarc.com/
@mad.architecture

August 5-8, 2022

Brought to you by:

AIA
Communities
by Design

Reimagining Petaluma

Petaluma, CA DAT Report

Disclaimer

The ideas represented in the following report are those of the American Institute of Architects' design assistance team, based on our observations of Petaluma and its existing plans, the insights gleaned from the community's public workshops and conversations, and the ideas shared with us about the area and the aspirations for it in interactions with a range of stakeholders. The process has informed our thoughts and this report represents our best professional recommendations in the public interest. We do not serve a client in this endeavor. The report, and the process that produced it, is a public service to the Petaluma community.

The ideas captured here represent four intensive days of work (August 5-8, 2022) and the information available to us at the time of this writing. We do not expect this report to be followed as verbatim, prescriptive advice. This work represents a beginning – we hope a new beginning – for the area. It should be understood as a developmental tool, and we expect the community will expand on these ideas and amend them as you make it your own. This report serves as an opening mechanism to begin the necessary public work and we expect the ideas to evolve and change as you utilize it and as Petaluma continues to evolve through the public processes to follow.

Contents

Introduction

The Design Assistance Team Program

The DAT program is a public service of the American Institute of Architects (AIA). Through the DAT program, over 1,000 professionals from more than 30 disciplines have provided millions of dollars in professional pro bono services to more than 200 communities across the country, engaging tens of thousands of participants in citizen-driven community development processes. While the normal public decision-making process is conducted within the parameters of representative government, design assistance transcends the political process and expands the public dialogue to include other sectors with the intent of building a platform for cross-sector collaboration, civic leadership, and a new approach to public work. The design assistance process brings together government and civic leaders, the business sector, non-profit leaders, and the general public in an inclusive, 'whole-community dialogue' to build collective action plans for the future. The Design Assistance program operates with four key considerations:

It begins with the idea that every community represents a unique place that is the product of its own history, tradition, and evolution. There are no one-size-fits-all approaches to community development. Therefore, each project is designed as a customized approach to community assistance which incorporates local realities and the unique challenges and assets of each community. Public processes are designed to meld with local practices, experiences and culture while expanding participation to all citizens.

Second, successful community strategies require whole systems analyses and integrated strategies. As a result, each design assistance team includes an interdisciplinary focus, incorporating and examining cross-cutting topics and relationships between issues. In order to accomplish this task, the AIA forms teams that combine a range of disciplines and professions in an integrated design process.

Third, successful communities work together for the common good, moving beyond narrow agendas to serve the whole. Each community is required to have a broad-based local steering committee that is representative and can lead community engagement efforts, ensuring all community members are represented in the process. The goal of the design assistance team program is to provide communities with a framework for collective action. Each project team is constructed with the goal of bringing an objective perspective to the community that transcends the normal politics of community issues.

Finally, community development requires collective public work that empowers citizens to partner. Each design assistance project is a public event, an act of modern democracy. The citizen expert is central to the process. Community-owned processes are designed to incorporate dozens of techniques to engage the public in a multi-faceted format, involve the community across sectors, and provide a platform for meaningful participation that builds a collective action plan. This approach allows the national team to leverage the best existing knowledge base available in formulating its recommendations – citizens. It also provides a platform for relationship building, partnership, and collaboration for implementation. The final action plans reflect citizen voice and include phased recommendations which begin with volunteer-driven, no-cost efforts and scale upward and outward. Citizen groups become empowered through the process and community leadership is broadened beyond government. Its grassroots approach captures the ethos of successful community development.

About The Petaluma Team

The Petaluma Design Assistance Team (see appendix for the full team roster) is an interdisciplinary group of professionals from around the country that were assembled specifically for this project. They were deliberately chosen from outside the state of California. They were not paid for their service to the Petaluma community. They were not engaged in any business development activities. It is also important to note that AIA teams do not serve a client. They were not another consultant team hired by a developer, institution, or government agency. As a group of legitimate outsiders, their efforts are all made in public service to the community and the recommendations offered in this report are done so in the public interest, taking into account the community's values and aspirations, as well as the existing conditions. The team's role in this process included the following key components:

- The review of dozens of existing plans and background documents about the area.
- The observation of conditions in the area in order to gain an understanding of Petaluma's physical framework, the issues facing the community, and its opportunities.
- Conversations with resident experts and stakeholders to benefit from their experience and knowledge about existing conditions, community values, priorities, and aspirations for the future.
- The application of their best professional expertise in the public interest, using information learned through the process and community priorities to develop a set of strategies that respond directly to the needs, values, and desires of the community.

The Petaluma DAT Charge

In late 2019, Petaluma submitted an application to the AIA for a project that would help the community create a vision for achieving a well-designed, equitable, carbon neutral city within the next 25 years, with the intention of integrating the DAT recommendations into the upcoming General Plan update. The original application was accepted by the AIA in 2020, a DAT team leader was duly appointed, and community representatives and AIA staff began discussing next steps for moving forward with the project. In March of 2020, the Covid-19 pandemic halted those plans, ultimately resulting in a two-year pause in the process. In the intervening years, Petaluma continued to make significant progress with regards to its livability and climate goals, including the adoption of the Climate Emergency Framework, which became the guiding document for Petaluma's General Plan and Climate Action Plan. The City also received a Cool City Challenge program grant to help neighborhoods become more planet friendly, disaster resilient, and community rich by engaging 300 Petaluma blocks. Given those and other developments, it was obvious that the focus of the DAT should evolve to better reflect Petaluma's present day needs in 2022 and to complement the continued forward momentum of the preceding two years. Accordingly, the DAT concentrated on creating a plan for achieving a more equitable and resilient Petaluma through improving mobility, increasing connectivity, creating 15-minute neighborhoods, and decarbonizing the community. The following report is offered in the public interest with those goals in mind. We hope that it may serve as a guide to implementation in the coming years.









Positive
outcomes


Petaluma










YES!


Reimagining Mobility

Reimagining Mobility

For the City of Petaluma to achieve its goals related to carbon neutrality, climate resiliency, connectivity, safety, and equity, it must reimagine how residents, visitors, and commuters move around and through the community. Prioritizing space (e.g., the number of travel lanes and the number of parking spaces) and time (e.g., at signalized intersections) for motor vehicles and single-occupant vehicle (SOV) trips runs counter to Petaluma's community goals and City Council priorities. To reduce vehicles miles traveled (VMT) and its negative impacts, Petaluma must:

1. reallocate space, time, and resources to converting SOV trips to walking, bicycling, and transit trips, and
2. reduce the distance travelers must traverse to meet their daily needs.

Preliminary Observations

The Design Assistance Team (DAT) participated in a community tour and conducted a preliminary review of local, transportation-related documents including the following:

- City Council Goals and Priorities, FY 2021-2023
- Capital Improvements Program
- City Streets Standards
- 2008 Bicycle and Pedestrian Plan
- 2022 Active Transportation Plan maps
- 2021 General Plan: Existing Conditions Report – Transportation
- 2022 Local Road Safety Plan

The DAT observed the following:

- Each of City Council's goals address transportation in some way. City Council recognizes the need to prioritize safe and connected streets and trails for walking, bicycling, and transit. Furthermore, City Council recommends adopting a VMT policy consistent with Petaluma's goal to be carbon neutral by 2030.
- The Public Works & Utilities Department has found recent success in piloting and experimenting with new street design solutions, such as the parking-protected bike lanes on Rainier Avenue and the mini traffic circle at Bassett Street and Upham Street.
- While many of Petaluma's neighborhoods feel safe and comfortable internally for walking and bicycling, several barriers inhibit inter-neighborhood and cross-town travel. These barriers include the 101, McDowell Boulevard, the SMART rail, the Petaluma River, and Petaluma's high-speed and high-volume roadways.
- Washington Street serves many different purposes including: connecting west Petaluma to the 101 to east Petaluma; providing access to key destinations such as downtown, the Fairgrounds, the SMART station, and commercial areas; and serving as a gateway for the community. However, its roadway width, high traffic volumes, high traffic speeds, and lack of high-comfort and connected sidewalks and bikeways makes the roadway a barrier to active transportation.

Community Input

Attendees at the community workshop on August 5, 2022, specified several challenges, assets, and opportunities for improving transportation in Petaluma.

Existing Challenges

- Narrow sidewalks
- Fragmented bikeway network
- Unreliable transit service
- Limited cross-town connectivity
- Motorists speeding through neighborhoods

Existing Assets

- Walkable downtown
- Some walkable and tree-shaded neighborhoods
- Parks and paved trails

Opportunities for Action

- Discourage driving and encourage walking, bicycling, and transit.
- Widen sidewalks, fill sidewalk gaps, and make crossings safer.
- Expand the bikeway network.
- Provide shared micromobility options, e.g. e-bikes and scooters.
- Increase secure bike parking.
- Provide fare-free transit.
- Reduce commuting distance and commuting by car.
- Reduce motor vehicle volumes and speeds.

Recommended Actions

Based on preliminary observations and what community members highlighted as challenges and opportunities for transportation and mobility, the DAT makes the following recommendations, categorized into three big ideas:

1. Remove Barriers

2. Create Connections

3. Expand the Framework

Remove Barriers

Roadways and intersections with high traffic volumes and speeds, railways, the Petaluma River, and gaps in the active transportation network are significant barriers for walking and bicycling. Removing or mitigating these barriers is essential for making Petaluma safe and comfortable for people on foot or wheels.

Fix Washington Street

Washington Street is one of Petaluma's lifelines: it facilitates cross-town trips; provides a direct connection to downtown, the Fairgrounds, and key commercial destinations; and it interfaces with the 101. However, it acts as a barrier to multimodal travel because of its number of travel lanes, motor vehicle speeds, and lack of safe and comfortable crossings. Previous and ongoing planning efforts have identified Washington Street as a high-crash and high-injury corridor, especially for people walking and bicycling. The City and its partners must fix Washington Street to meet its goals related to climate resiliency, carbon neutrality, vehicle miles traveled, connectivity, and safety.

Implementation

Washington Street can be transformed physically and operationally to be safe and comfortable for people walking and people bicycling who are traveling along or across the street. A reimagination of Washington Street could include continuous and high-quality sidewalks and bikeways; street trees, landscaping, and green infrastructure; slower motorist speeds resulting from fewer and narrower travel lanes, traffic signal coordination, and traffic calming features; high-comfort crossings and intersections that prioritize time and space for walking and bicycling; bus stops that provide

shade, seating, shelter, and serenity; and wayfinding that improves the legibility of the transportation system.

Critical Next Step

Conduct a corridor study that emphasizes safety, environmental sustainability, and placemaking over motor vehicle throughput.

Address the road, rail, and river

In addition to Washington Street, several other physical barriers currently prevent safe and comfortable travel for people walking and people bicycling, including: the City's high-speed roads (e.g., McDowell Boulevard, Ely Street, Lakeville Highway), the SMART rail, and the Petaluma River.

Some existing at-grade crossings between Petaluma's paved trails and high-speed roads require trail users to take indirect, uncomfortable, and time-consuming routes to continue on their way.

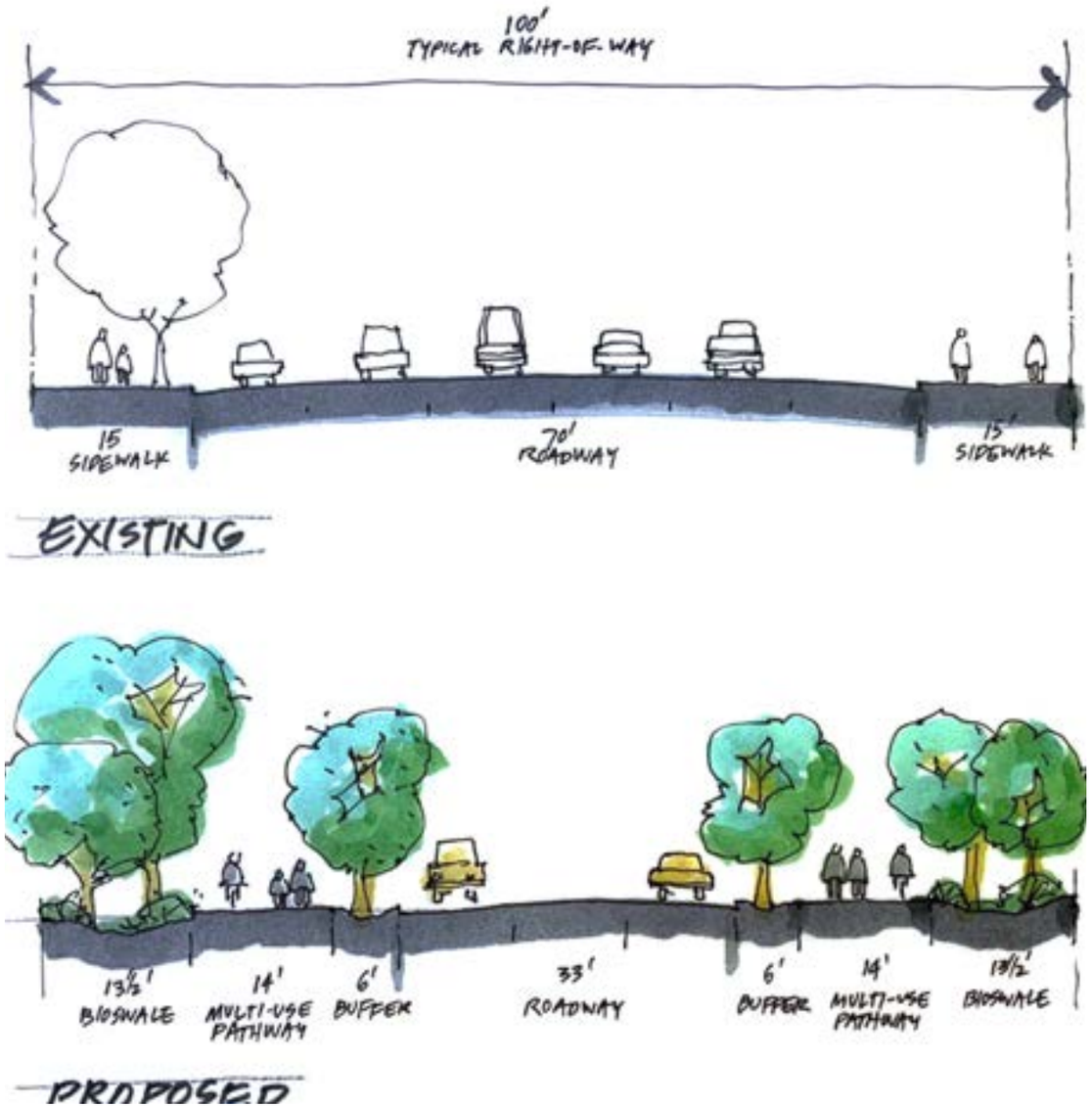
While Petaluma has successfully installed crosswalk markings, signs, and rectangular rapid flashing beacons (RRFBs) at mid-block locations and intersections, activated RRFBs do not legally require motorists to stop or yield. They can also result in multiple-threat scenarios on multi-lane roadways where stopped motorists may obscure the view of approaching motorists, increasing the likelihood that motorists will strike crossing pedestrians.

Implementation

To mitigate and remove these barriers, the City should improve existing at-grade crossings for roadways, invest in grade-separated crossings between trails and roadways, and construct new grade-separated crossings for the SMART rail, Petaluma River, and roadways where high-comfort crossings can't be constructed at grade.

The City can update their street design and construction standards to include standard details for intersections and crossings that prioritize space, geometry, and operations for people walking and people bicycling.

Conceptual rendering of an improved Washington Street, featuring a tree-lined, bike-and-pedestrian friendly narrowed roadway.



Narrow existing roadways to reduce them as barriers to active transportation.

Proposed cross-town connectors, such as the ones to extend Rainier Avenue and Caufield Lane, must prioritize walking and bicycling to prevent them from becoming future barriers to active transportation.

Crossings for paved trails (e.g., the Lynch Creek Trail) should prioritize safety and convenience for pedestrians and bicyclists traveling along the trail. At-grade crossings with high-volume, high-speed roadways deter trail usage.

Critical Next Step

Study and prioritize at-grade crossings for upgrades or grade separation.

Make sidewalks and curb ramps accessible

The Americans with Disabilities Act requires that all public facilities comply with the United States Access Board's Accessibility Guidelines. The Accessibility Guidelines include guidance for curb ramps, sidewalks, paved trails, crossings, intersections, and bus stops.

Many of Petaluma's sidewalks, curb ramps, and bus stops require upgrades to be accessible to people with disabilities while also benefiting other travelers such as children on bicycles and people with strollers. While the City owns sidewalks in the public right-of-way, Petaluman property owners currently bear the responsibility to repair and maintain them. This arrangement often results in broken and uneven sidewalks that property owners—especially low-income homeowners—are unable to pay to repair.

Furthermore, the City's annual resurfacing program currently only addresses the pavement between the curbs and doesn't include constructing new curb ramps or reconstructing non-ADA-compliant curb ramps.

Implementation

The City of Petaluma should identify and prioritize sidewalks and curb ramps that require repair or reconstruction to comply with the Accessibility Guidelines, beyond the ongoing curb ramp reconstruction project in downtown Petaluma. Historic disinvestment or lack of investment should influence the prioritization process to advance the City's social equity goals. The City should then assume responsibility for these repairs, since sidewalks are public infrastructure and the expectation that homeowners would pay for repairs disproportionately impacts low-income people.

The City can more efficiently install ADA-compliant curb ramps by including them in their regular street resurfacing program. This would streamline local efforts to improve crossings by consolidating the installation of signs, pavement markings, and curb ramps.

Critical Next Step

Prioritize sidewalks, curb ramps, and bus stops outside of downtown for repair and upgrades.

Upgrade intersections and crossings

Crossing design and traffic signal operations greatly affect the pedestrian experience, since the threat of being struck by motorists is a major source of discomfort and can be a deterrent for walking trips. Driveways, intersections, and traffic signals should clearly communicate right of way, minimize through and turning motorist speeds, and reduce conflict points.

Implementation

To upgrade infrastructure and signal operations at intersections and crossings, the City should integrate pedestrian recall (always) and Leading Pedestrian Intervals (where high pedestrian volumes are expected or desired). The City should also use the Federal Highway Administration's (FHWA) Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations to determine the best crossing treatments based on roadway characteristics

Critical Next Step

Study and prioritize crossings and signalized intersections for pedestrian upgrades.

Create Connections

Connectivity and reliability are paramount for making walking, bicycling, and transit trips more attractive than SOV trips. Active transportation and transit should be safe, easy, convenient, comfortable, and direct.

Reallocate space (road diet)

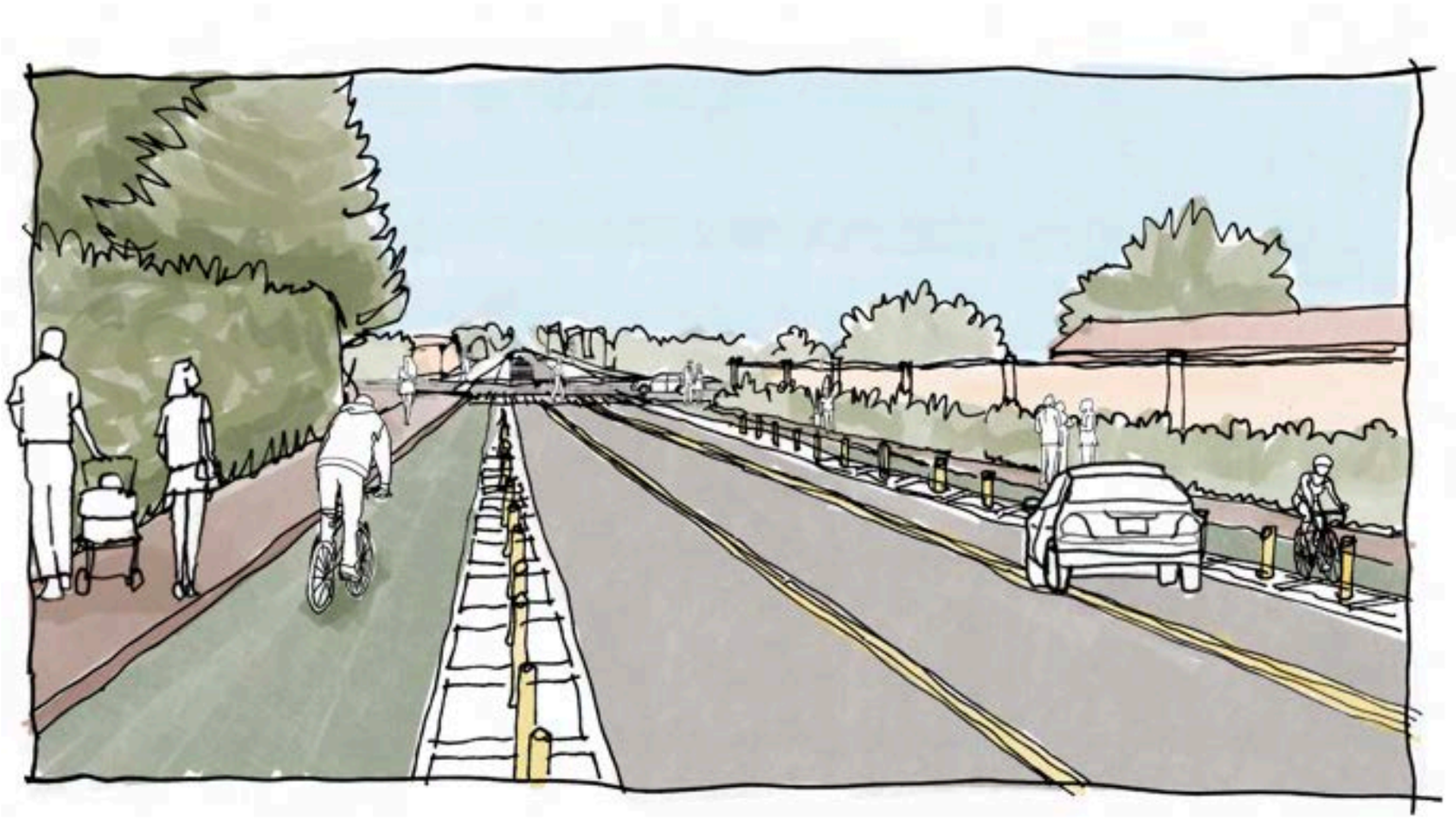
To meet its goals, the City must expand its bikeway network and enhance its Petaluma Transit system operations. However, implementation via roadway widening is often cost prohibitive and may not support the City's VMT reduction goals. In advance of full roadway reconstruction, the reallocation of existing roadway space through restriping and pilot installation of low-cost materials can be an effective method to installing bike lanes, bus lanes, and queue jump lanes. Known as "road diets," roadway reconfiguration can include travel lane removal, parking lane removal, and lane narrowing to maintain existing curb-to-curb width or existing right-of-way. A typical road diet converts a road with four travel lanes to a street with two travel lanes, a center turn lane, and bike lanes. Local examples include Petaluma Boulevard South and Rainier Avenue.

Implementation

The City of Petaluma must reimagine how it allocates space on its arterials. The City should identify candidates for road diets, which are generally characterized by some combination of the following: three or more travel lanes, travel lanes that are 12 feet wide or wider, underutilized parking lanes, or average daily traffic volumes under 15,000 vehicles per day. The City can then develop short-term concepts that can be implemented through simple resurfacing and long-term concepts that necessitate full reconstruction. The elements included in the concepts should tie directly to City goals and may include bus lanes, bike lanes, and crossing treatments in the short term and street trees, green infrastructure, shared-use paths in the long term.

Critical Next Step

Identify and study streets that may be near-term or long-term candidates for space reallocation.



Reallocate space to prioritize the movement of people rather than the movement of cars.

Build out paved trail network

Because of their limited points of conflicts with motorists, their shade, and their relative quiet, Petaluma's paved trails typically see users that might not otherwise travel by foot or bike on the city's streets. However, the existing paved trail system is disconnected and includes uncomfortable and inconvenient at-grade crossings with high-volume, high-speed streets.

Implementation

Following the creation and adoption of the Petaluma Active Transportation Plan (ATP) in 2023, the City should develop a paved trails plan, advance its implementation, and upgrade crossings with roadways. The ATP should prioritize connections to trails and include recommendations for on-street sidepaths that embody the same feeling of safety and comfort as paved trails.

Critical Next Step

Develop a paved trails plan.

Identify pedestrian focus areas

Schools, bus stops, and SMART rail stations present transportation challenges that are unique to students and transit users in their vicinity. Street and intersection design should address these challenges head-on by leveraging a consistent set of design strategies. The identification and delineation of pedestrian focus areas can help the City prioritize transportation investments and further encourage transportation by walking, bicycling, and transit.

Implementation

The City should identify pedestrian focus areas and associated context-sensitive design solutions. This effort could integrate with and enhance the City's existing Safe Routes to School efforts. For example, the City should be more aggressive with traffic calming and traffic control around schools to more effectively protect schoolchildren, who are some of our most vulnerable travelers. Around transit stations and stops, the City should install more trees and shade structures, secure bicycle parking, and wayfinding.

Critical Next Step

Determine criteria for defining pedestrian focus areas.

Improve transit reliability and frequency

Only 3 percent of Petaluman commuters use transit to get to work. Three quarters of Petaluma Transit riders earn less than $35,000 annually, and over half of Petaluma Transit riders are Hispanic.

Petaluma's low-income and Hispanic populations are underrepresented in City leadership and in community engagement. Their underrepresentation may be due in part to fear of deportation, mistrust in the government, and lack of means (time, transportation, information, childcare, etc.), along with the need for more proactive and inclusive outreach efforts from City staff and their partners.

Implementation

In coordination with Sonoma-Marin Area Rail Transit, Sonoma County Transit, and Golden Gate Transit, the City of Petaluma and Petaluma Transit should prioritize increasing the reliability and frequency of their services. In addition to extolling the values of racial and socioeconomic equity in transportation, better transit service would further encourage all residents and visitors to use transit rather than drive.

For transit improvement projects (and all transportation initiatives), the City should invest time and resources into more proactively engaging with and involving Hispanic people and low-income residents, workers, and visitors.

Critical Next Step

Develop a local short-range transit plan.

Expand the Framework

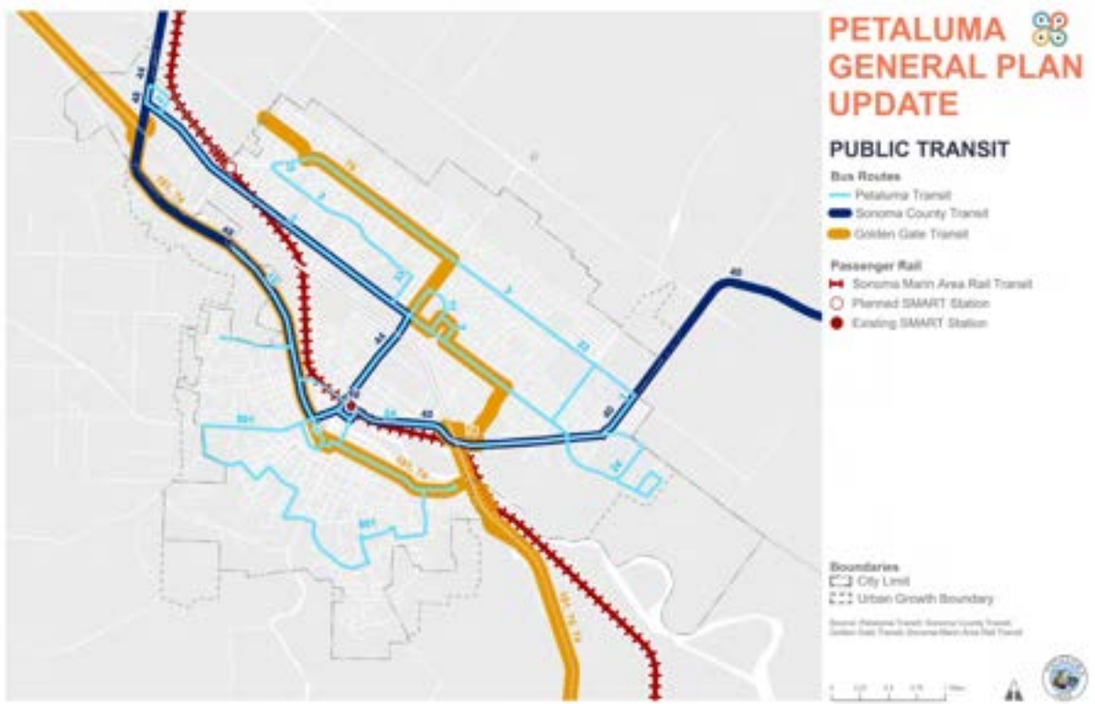
Local policies, programs, and protocols dictate how transportation projects are planned, designed, operated, and maintained. Petaluma can optimize mobility outcomes by expanding its internal processes.

Update street design standards

The latest version of Petaluma's design and construction standards do not reflect essential elements of Complete Streets, and its standard street configuration templates were last updated in 1996. Best practices for street design in the United States have evolved in profound ways since then, especially in the arenas of prioritizing safety for active transportation and incorporating landscaping and green infrastructure.

Implementation

The City should review, revise, and add to their street construction standards to align with the City's goals for reducing vehicle miles traveled, improving safety, and providing connectivity for people walking and people bicycling. Preliminary recommendations for the street configuration templates include lowering design speeds, defaulting to 10' or 11' widths for travel lanes, and requiring sidewalks on both sides for all streets.



Improvements to the reliability and frequency of transit services would ihave positive impacts on underrepresented populations and potentially reduce the number of cars on the road.

The City can also take advantage of the ongoing Petaluma Active Transportation Plan to develop guidelines for selecting bikeways and crossing treatments. For example, the City may choose to require certain bikeway types by street type to provide safe and comfortable conditions for new and less confident bicyclists. This could include Class I bikeways (shared-use paths) and Class IV bikeways (protected bike lanes) on arterial roads, Class IV bikeways and Class II bikeways (standard or buffered bike lanes) on collector streets, and Class II bikeways and Class III bikeways (bicycle routes and bike boulevards) on local streets. In the meantime, the City should use available national resources such as FHWA's Bikeway Selection Guide and FHWA's Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.

Critical Next Step

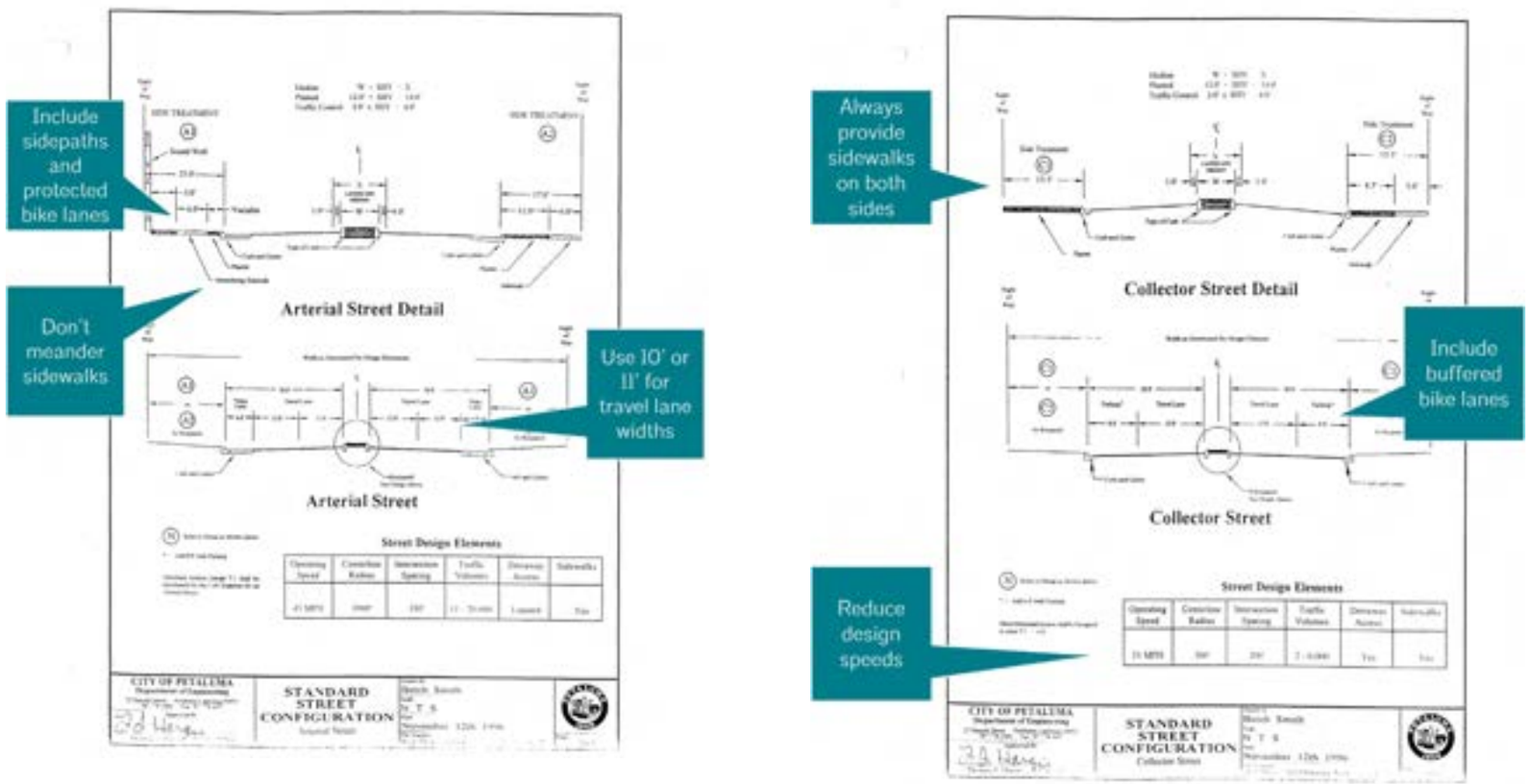
Review and update street design and construction standards.

Create a neighborhood traffic calming program

Residents generally expect their residential streets to have low volumes of motor vehicle traffic and low motor vehicle speeds. During the early stages of the COVID-19 pandemic when the need for additional outdoor space was at a premium, Petaluma—like many other cities—implemented "Slow Streets." These included temporary barriers to reduce and slow motor vehicle traffic, creating a more inviting space for people walking and people bicycling. Even after the removal, the need for a formal neighborhood traffic calming program remains.

Implementation

Building on the momentum of the recent installation of a mini traffic circle at Bassett Street and Upham Street, the City should create a program to manage, study, and respond to requests for traffic calming treatments in Petaluma's neighborhoods. The program would also serve as a tool for the City to pilot design solutions and implement bike boulevards, such as the one planned for 5th Street. In addition to more traditional traffic calming treatments such as curb extensions and speed humps, the City should explore or continue to explore mini traffic circles, raised crosswalks, chicanes, and one-lane pinch points.



The current street design standards should be updated to reflect current best practices.

Critical Next Step

Study the feasibility of creating a neighborhood traffic calming program.

Create a downtown parking program

Motorists can currently park in one of the 660 on-street spaces or 980 off-street spaces in downtown Petaluma without paying a fee. Table 11.1 in Chapter 11 of the City's Zoning Code presents required parking minimums by use, including the following for a single-household building: 1 covered space and 2 additional covered or uncovered spaces. Free and abundant parking contributes to the attractiveness and convenience of travelers using single-occupant vehicle trips rather than walking, bicycling, or using transit.

Implementation

To reduce vehicle miles traveled and its associated negative impacts, the City must consider creating a downtown parking program that charges fees based on parking location. For example: to prevent motorists

circling to find on-street parking, off-street parking should have lower fees than on-street parking. The program should address the growing need and demand for electric vehicle charging. The program could also include residential parking permits to discourage motorists from parking in residential areas to avoid paying parking fees within the paid parking zone. The program should also include considerations for curbside space being used for outdoor seating and dining, bicycle parking, and public art. Finally, the City should reimagine its parking and loading requirements to be maximums rather than minimums.

Critical Next Step
Conduct a citywide parking study.

Update Safe Routes to School program

The Petaluma School District does not provide bus service for students, and it consists of magnet schools that don't restrict attendance by home location. Trips to school might require cross-town or longer-distance travel, and Petaluma's walking and bicycling network isn't fully built out. This results in most students being driven to school, some students using Petaluma Transit's bus services, and a small number walking or bicycling to school.

Implementation
A more comprehensive Safe Routes to School program would prioritize sidewalks, bike lanes, trails, crossings, and intersections that more adequately provide safe and comfortable walking and bicycling conditions for students, especially elementary school students. The City should update its existing Safe Routes to School program to offer incentives, provide information and resources, and monitor progress.

Critical Next Step
Update the existing Safe Routes to School program.

Explore micromobility

Approximately 19,000 Petaluman residents commute out of Petaluma to work, and approximately 22,000 employees commute into Petaluma for work. To get to work, only 2 percent of Petalumans walk, less than 1 percent bike, and 3 percent use transit. Simply put, most Petalumans drive to work (and other purposes) because it's currently the most attractive and convenient option.

Micromobility (electric bikes, electric scooters, and other small, low-speed vehicles) can make transit more attractive by providing an option for transit users to get to and from transit stations and stops, also known as first- and last-mile connectivity. The Downtown Petaluma SMART station and Petaluma Transit Mall on Copeland Street are approximately a half mile away from the core of downtown Petaluma.

Implementation
To further encourage commuters to walk, bike, use transit, or leverage some combination to get to work, the Metropolitan Transportation Commission awarded a $826,000 Capital Bike Share grant to Marin and Sonoma Counties to implement a 300 e-bike system that serves SMART stations between Santa Rose and Larkspur.

The City of Petaluma can further augment the SMART bike share system by creating a local program to pilot micromobility vehicles that are available for rental through mobile apps. To test its effectiveness, the City could explore defining an operation zone that connects the Petaluma Downtown SMART Station to downtown Petaluma via Washington Street and D Street.

Critical Next Step
Establish a micromobility pilot program.


Creating
Connectivity

Creating Connectivity

Historic landscape

At one point in time, Tidal wetlands covered over 16,000 acres along the lower Petaluma River. These wetlands were composed of a range of estuarine habitat types. The river entered the estuary near present day Payran Street and ran for 17-miles to its mouth at San Pablo Bay. Influenced by tidal flux and freshwater input, the wetlands formed a dynamic landscape that supported a wide variety of plants and animals. Bordering the estuary were tidal-terrestrial transition zones, a link between upland and fluvial habitats. Non-tidal wetlands occupied 11,400 acres throughout the watershed, large wetland complexes existed at the Denman Flat area which provided Important habitat to amphibians, migratory waterfowl, and the endangered tricolored blackbird. While flows were minimal in the dry season. The wet season saw several periodically inundated areas along the mainstem of the river and on the alluvial plain to the east.

The City of Petaluma was incorporated in 1868 and rapidly became an important shipping hub. The Petaluma River (formerly the Petaluma Creek) is a tidal slough that has been reshaped and renamed for human uses. As the shipping industry grew, the river channel was modified to become more conducive to navigation. In the 1880's a major effort by the Army Corps was initiated with the purpose of dredging and straightening the river. Railroad lines were also constructed across the watershed in the late 19th century.

This large-scale dredging and construction of numerous cut-offs completely altered the native ecosystem. Since then, tidal wetland types have decreased by 58%. Despite this loss, the Petaluma marsh remains the largest contiguous expanse of historical tidal marsh in San Pablo Bay. Non-tidal wetlands have decreased by 84%, given up for urban development.

In addition to the loss of tidal wetlands, non-tidal wetlands throughout the watershed have also drastically changed. Almost all the wet meadow that existed on the northeastern part of the river has been eliminated. Today most of this area is urban development. As a direct result of this urban development and prior agricultural use the groundwater levels have significantly declined. Current data indicates that the groundwater levels in areas that previously supported non-tidal wetlands are at least 10 feet deep.

It is important to understand the historical environmental context which informs how natural systems existed in a particular place and how their physical characteristics continue to influence ecological patterns and processes in current times. This ecological context helps identify opportunities and constraints posed by the current conditions and any appropriate restoration or management techniques.

Flood Risk

The climate along the Petaluma River watershed is characterized by mild winters and dry summers, resulting in seasonal variations in water flow. During the wet season, flooding is common in the lower areas of the watershed

Areas most at risk from flooding tend to concentrate along the Petaluma River and its tributaries. The northwestern end of the city -Denman Flats- is most at risk from flooding since it falls right in the middle of the FEMA floodplain. This area is predominantly zoned as commercial with some industrial and mobile homes. The southeastern portion of the city is also significantly vulnerable, from here moving further south are complete salt marsh wetlands. In the southeastern portion you have the Petaluma Water Recycling (Treatment) Facility and a large Agricultural/Commercial Development which fall directly within the 100-year floodplain and will require adaptations in the next 50-years.

Despite all the ecological changes and a decrease in the ecosystem functions the watershed once provided, a large amount of undeveloped land within the watershed still exists providing ample opportunities for the restoration of historic wetlands, providing connectivity of wetland habitats. Restoring these tidal, non-tidal and fluvial habitats will provide flood mitigation, groundwater recharge, water filtration and carbon sequestration benefits.

Preliminary Observations

The City of Petaluma has been proactive in preparing plans and establishing urban growth boundaries to manage development, protect valuable natural resources and restore a healthy watershed. Parks and open spaces are an integral part of the community and focus should continue to focus on the restoration of a healthy watershed through the expansion of land for conservation and preservation.

Petaluma River is a tidal slough that has been reshaped to suit human purposes. Recent flooding and siltation have affected the rivers' water carrying capacity, creating serious problems. Increased amounts of impervious areas in buildings and roads accelerate the rate of erosion and sedimentation and contribute to the poor water quality and degradation of natural resources and habitats along the river. Urbanization and its increased expansion play an important role in the health of the watershed.

As part of the investigation process our SDAT team reviewed the following documents and extracted some of the goals enumerated below:

- Petaluma AIA SDAT Application, 2020
- Petaluma General Plan 2025
- Petaluma Climate Emergency Framework
    - Equity – provide equal access to parks and open spaces.
    - Reduce impervious surfaces and develop green street standards, and stormwater management infrastructure to slow, filter, and cleanse stormwater runoff from impervious surfaces (e.g., streets, sidewalks).
    - Expand the urban forest and integrate large, primarily native, trees in neighborhoods to provide shade and improve walkability, air quality, heat attenuation, stormwater capture, and carbon
    - Restore and enhance the Petaluma River, recreating a healthy and accessible waterway and pedestrian-oriented zone along the banks.
- Petaluma Watershed Enhancement Plan (2015):
    - Maintain navigability of the river
    - Improve flood control
    - Restore, create and protect natural habitats and enhance native vegetation along river corridor
    - Expand public access and awareness of the river
- Petaluma Valley – Historical Hydrology and Ecological Study, 2018

Community Input

Attendees at the community workshop on August 5, 2022, specified several challenges, assets, and opportunities that prompted the team's recommendations around stronger connectivity through green corridors:

Existing Challenges

- Limited ways to cross the freeway and the river
- Pollution of the Petaluma River
- Limited shade when walking in neighborhoods

Existing Assets

- Some walkable and tree-shaded neighborhoods
- Parks and paved trails

Opportunities for Action

- More trees and restoration of wetlands
- Encourage use of the river
- Green belt with walking and cycling paths
- Promoting green zones and public/ open spaces
- Limit asphalt and nonporous surfaces

Recommended Actions

Based on community input, the above established goals, and our professional expertise we developed a series of existing tasks, challenges, and corresponding recommendations to address these measures. Those include:

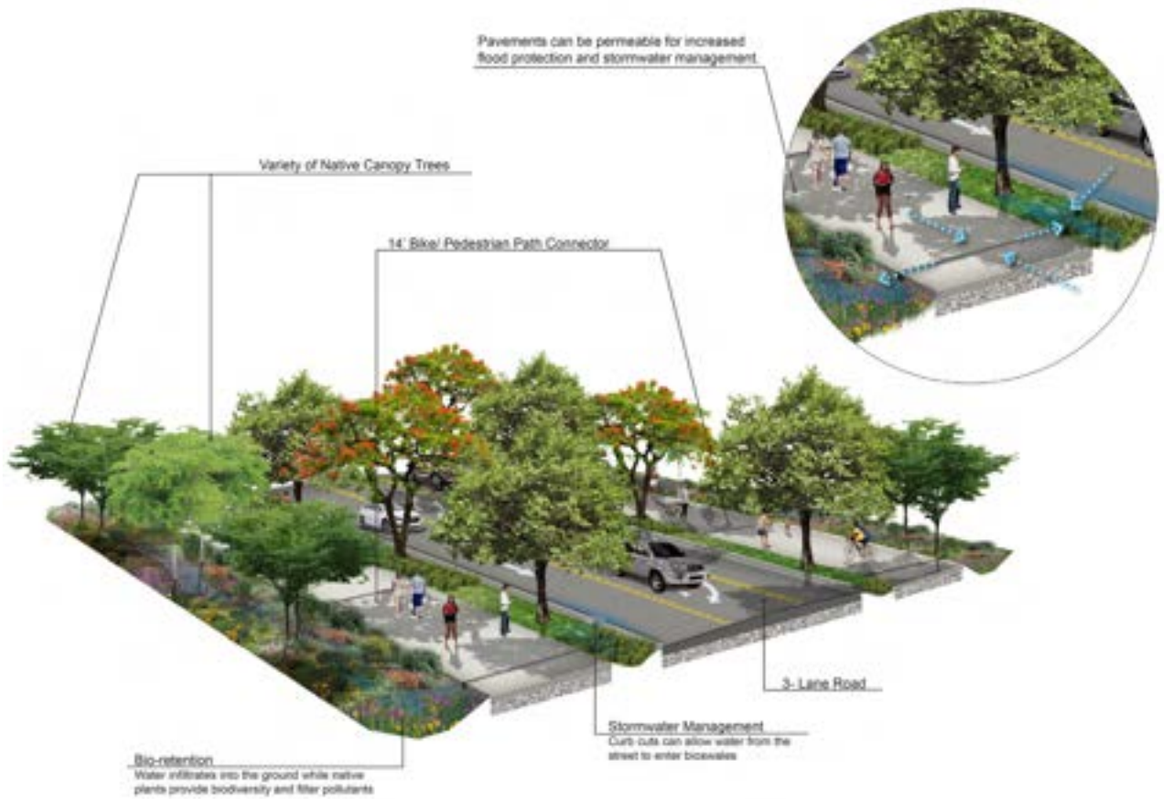
1. Prioritize bike and pedestrian circulation to enable cohesive and diverse mobility options.
2. Provide green infrastructure to manage stormwater, increase capacity for retention, prevent erosion and clean discharge to Petaluma River.
3. Incorporate more nature into the urban environment to facilitate ecosystem restoration, increase biodiversity, improve air quality, add trees to mitigate urban heat island and improve carbon sequestration.
4. Enhance connections to parks and green open spaces
5. Restore and protect historic marshlands along the Petaluma River to increase water holding capacity and mitigate flooding and sea level rise

Given Petaluma's residents increased activism and interest we believe the time is right to tackle these goals and transform the City of Petaluma into an example of resilient, sustainable, and equitable living community.

Create a Green Ribbon of Connected Corridors:

Developing a system of interconnected green corridors will provide many benefits for residents and wildlife. Green corridors offer opportunities to relax while enhancing social interaction. Green corridors also provide a major role in a community's well-being by promoting physical activity – increasing levels of walking, biking. Consider reallocating space within the existing automobile centric right of ways, with the purpose of creating a multipurpose pathway for bicycles and pedestrians that is flanked by a shaded canopy of trees and provides green space for the development of bioswales.

Maximize the benefits of the green corridors by connecting green spaces to existing community hubs- transportation or commercial in turn forming a greater green urban framework. Creating a network of green infrastructure that would manage stormwater with natural systems as an alternative to traditional gray drainage pumps and pipes. Green infrastructure includes rain gardens, bioswales, tree pits, natural retention and detention ponds, blue and green roofs, rainwater and stormwater cisterns, and permeable pavement. These natural drainage systems capture, retain, filter, and slow the release of stormwater, using the storage, infiltration, evaporation, and carrying capacity of distributed natural elements rather than buried pipes. In addition, green infrastructure provides attractive landscape amenities, reduces the need for potable water use, lowers the urban heat island effect and stormwater runoff, improves water quality, decreases flooding, sequesters carbon, and recharges needed groundwater reserves. Returning water back to the land naturally rather than sending it down a pipe through a storm sewer is a strategy communities need to adopt. They must work with nature, not against it.



Reallocating space with the existing roadways would allow for the development of multipuprose pathways and bioswales.

This new green ribbon corridor would connect people and green spaces, while collecting, conveying, and cleaning water as it filters through the bioswales prior to discharging into the Petaluma River.

Green corridors allow connections to **people** by:

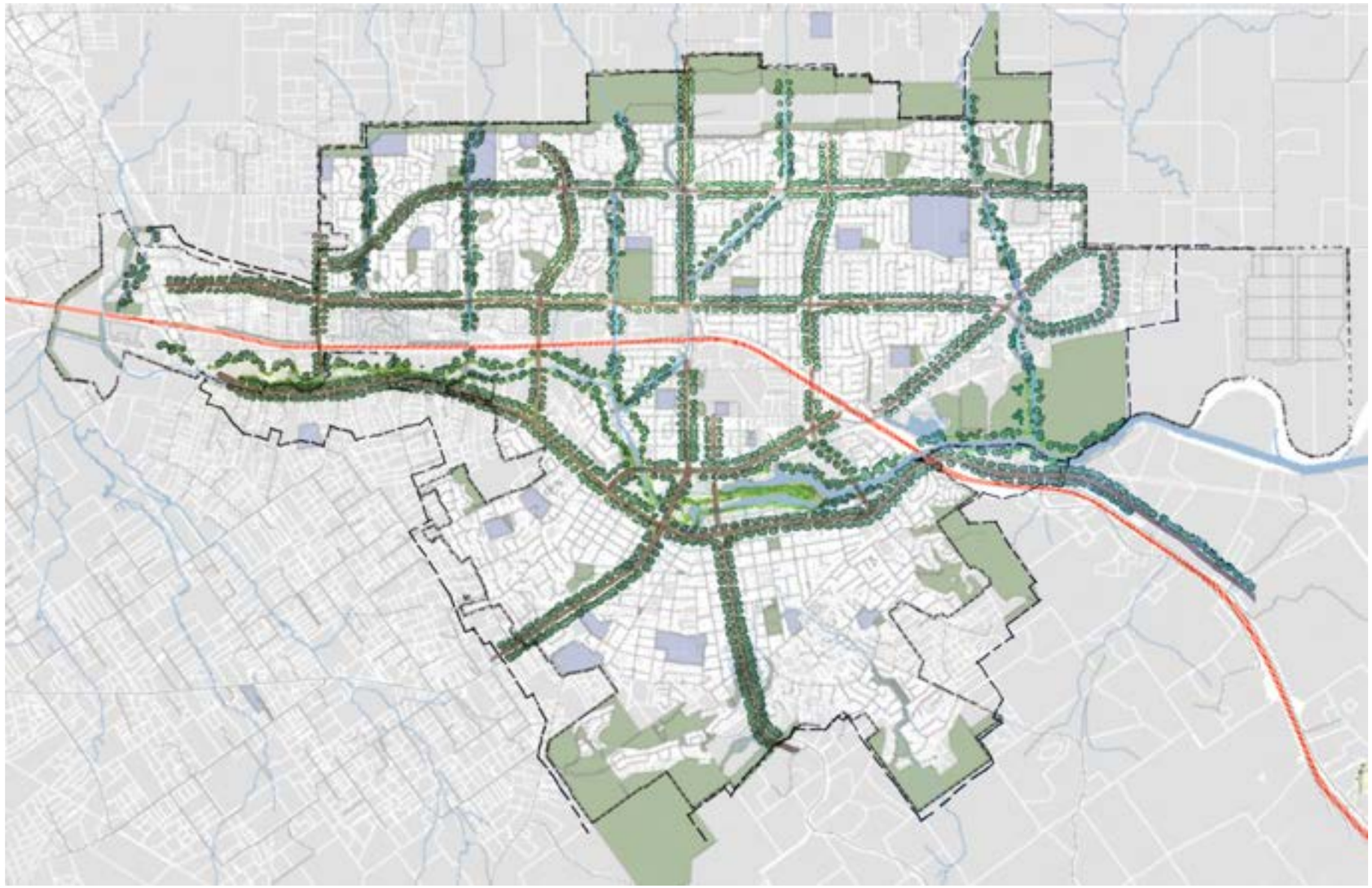
- Reducing private automobile use and providing safe and reliable alternative methods of mobility – walking and biking
- Adding wider pathways
- Shading pathways
- Creating safe crossings
- Providing amenities among pathways

Green corridors allow connections to **community** by:

- Creating spaces for social interaction and economic diversity
- Enhancing connections to the river
- Developing of cultural and recreational opportunities sensitive for environment
- Providing flexible spaces for mixed events – celebrate diversity
- Providing spaces that adapt and respond to changing needs

Green corridors allow connections to **nature** by:

- Decreasing impervious spaces – allowing nature to reestablish itself
- Increasing opportunity to provide diversity of species
- Allowing for natural processes to restore themselves



Transform grey corridors into healthy, walkable, bikeable, resource-rich diverse corridors.

- Managing land to improve carbon sequestration and reduction of transportation related emissions
- Managing land to improve water quality and stormwater management
- Creating a cooler Petaluma through the addition of more trees
- Restoring a sense of belonging and connection w nature

Restore Natural Ecology through the Creation of a Riverfront Park

Restoring the historic tidal marsh expands suitable wetland habitat and creates increased flood protection during the winter and store water during summer droughts. Wetlands are a powerful nature-based solution for climate mitigation, adaptation and biodiversity. They have the capacity to sequester carbon is double that of world forests. This strategy would create a 20-acre park and restore 26 acres of tidal marsh.

The restoration of these lost tidal marshes can provide flood protection due to increased storage for water capacity and groundwater recharge as well as providing added water filtration benefits. Restoring tidal marshes allow the reconnection of tidal conveyance of the Petaluma River.

In addition to the ecological benefits, this newly created riverfront park would provide public access to the water, create more nature-based recreational opportunities, that would allow for public education and awareness of the need to protect nature, provide flexible spaces for community interaction and multicultural recreation. The 20-acre park area could be floodable during storm conditions for added protection to the developed areas of the City.

A Riverfront Park adds 20 acres of park land for the city as well as 26 acres of restored wetlands for flood protection.

Reduce Heat Using Trees as Infrastructure

Trees within the public right-of-way are considered key components of the infrastructure of many cities. Street trees provide benefits that promote sustainability and help alleviate environmental problems. They provide shade and if properly placed can decrease building energy use. Additionally, trees can help cities control stormwater runoff given their leaves, stems, and roots slow rain from reaching the ground and capture and store rainfall to be released later. Street trees can provide other benefits, such as improved air quality, carbon storage, reduced noise, and aesthetic value. Studies also have shown that the presence of trees can have positive effects on mental health and cognitive function.

Urban areas generally lack suitable places to plant larger trees. Cities in the past have done a poor job in planting and maintaining trees, causing the trees to become hazards for houses, cars and infrastructure. In order to provide healthy trees that can fully provide their span of benefits, trees need the proper soil quality and volume. In urban environments that may mean providing proper infrastructure to support tree growth.

Trees in urban environments need uncompacted, well aerated, and moist soil in order to thrive. These conditions allow tree roots to obtain the essential components they require for healthy growth - nutrients, oxygen, and water. In addition, trees need an adequate volume of root, oxygen-rich soil to thrive and develop the roots to support their structure. Studies show that trees in urban conditions need a minimum of 1,000 cubic feet of soil per tree. Trees can become critical infrastructure, and reduce flooding and pollution given that 1000 cubic feet of good soil can conservatively hold about 200 cubic feet of water. Current technologies such as modular tree cells and structural soils make this volume achievable for urban conditions.

Recently, tree canopy has been recognized as an equity issue. American Forests, a nonprofit conservation

entity released an analysis in 2021, that demonstrated that low-income neighborhoods and communities of color have significantly less tree canopy. Those areas also are more likely to suffer from the urban heat island effect caused by a lack of shade and an abundance of heat-absorbing asphalt. Heat islands can be 10 degrees hotter than surrounding neighborhoods. As climate change continues to exacerbate heat in cities, people are realizing that trees are indeed critical infrastructure. The adjacent Petaluma map illustrates areas where the urban heat island effect is critical. Tree planting should be prioritized in these areas.

Trees are especially unique in that they appreciate in value and capacity to perform, rather than depreciate, over time. The older and bigger a tree gets the better it is able to perform its job.

Adopt Sustainable Strategies for Development

Stewardship of natural resources includes preservation and rehabilitation of ecological processes such as groundwater recharge, pollutant sequestration, pollination services, and nutrient sequestration.

California is already experiencing the effects of climate change, including warming temperatures, rising sea levels, longer fire seasons and shifts in precipitation. Wetlands – coastal, riparian, seasonal, or tidal – all stand to suffer some of the greatest and most immediate and noticeable impacts. The projected changes of greatest concern are sea level rise, salinity shifts, temperature increases, and an increase in the severity of storms

Landscaping to reduce water use can be helpful to greatly decrease the amount of water put on planted areas. Xeriscaping is the process of planting with native drought tolerant species that are adapted to the region's climate, which demand much less water to survive and still preserve a beautiful aesthetic. When watering the lawn or garden short cycles are more water efficient than on long period, this gives plants and the soil enough time to properly absorb water rather than having small standing pools. Another method to reduce water waste in the planted landscape is to create rain gardens to capture runoff and restore soil moisture and groundwater.

Implement waterwise strategies, such as:

- Avoiding any increase in impervious surface cover and contaminated stormwater runoff, helping protect watersheds, recharge groundwater, and mitigate climate change.
- Conducting soil testing to determine soil quality and composition. Lab testing is offered by many university extension offices. When more is known about the soil, then appropriate amendments can be added.
- Ensuring soil is healthy. Healthy soil amended with organic matter such as compost and other nutrients helps plants retain moisture and resist evaporation. Healthy soil also happens to be one of the earth's largest carbon sinks. Once soil is dried out and depleted of nutrients, flood and erosion risks increase and the many benefits of healthy soils are lost.
- Incorporating mulch, which slows down evaporation and protects plant roots from high and low temperatures. Organic mulches absorb moisture and retain it longer than soil that has not been mulched. Place mulch over the soil around plants (leaving some space around the trunk) to reduce evaporation, limit heat stress, and inhibit weed growth. Organic mulches include compost, shredded bark, leaves, and sawdust.
- Reducing compaction without tilling: Aerators can be used to reduce soil compaction without tilling, which causes erosion, evaporation, and greenhouse gas release from soil

- Selecting native and climate-appropriate plants that are adapted to the local environment. Native plants require less water, are more likely to survive drought conditions, and are more pest and disease tolerant than non-native species
- Relying on rainwater to irrigate landscaping. This is the most cost-effective and water-saving option, made possible with the use of native and drought-tolerant plants.

The 15-Minute City

The 15-Minute City

The 15-minute city is a concept that describes a residential community with a decentralized mixed-use development node that provides most of the resident's daily needs within a 15-minute walk from all the residents' homes. The concept – as we know it today – was articulated by Professor Carlos Moreno of Pantheon Sorbonne University in Paris and is loosely based on Jane Jacobs' classic book on urbanism The Death and Life of Great American Cites. The concept has recently been adopted as a planning principal by such influential bodies as the C40 Cities Climate Leadership Group, but the idea of an urban environment being created or substantially altered to better serve the daily needs of residents by purposely de-centralizing commercial functions, employment, and vital human services and thereby reducing automobile use leading to healthier, human-centric, and sustainable cities has many precedents and proponents in the 21st century. It is an idea with a great deal of traction.

One of the primary charges to the AIA DAT team was to apply this principle and describe what becoming a 15-minute city would mean to the City of Petaluma. To do this, we began with mapping exercises.

Note: the maps and drawings present within this section were created during the four-day DAT visit, and are intended to be conceptual and illustrative rather than prescriptive.

Community Input

Attendees at the community workshop on August 5, 2022, specified several challenges, assets, and opportunities for transforming Petaluma into a 15-minute city.

Existing Challenges

- Poor access to food and other needs in many neighborhoods
- Need more affordable housing options
- Support and services for socioeconomically disadvantaged communities
- Very car-centric, leading to feelings of unsafety for pedestrians and walkers

Existing Assets

- Downtown node is walkable and provides many services and experiences

Opportunities for Action

- Create walkable nodes with food
- Allow more mixed-use neighborhoods that support small businesses
- Rent control
- More equitable spending and development policy between East and West Petaluma

Our Approach

First, given the City's robust mapping database that illustrate social vulnerability and environmental degradation information across the City, we overlayed maps of what we felt were the most relevant data sets to determine where in the City these impacts were compounded. Map 1 ("Base Map") is the base map of Petaluma we used as an underlay.

Map 2 ("Environmental Impacts") overlays heat islands (defined by the US EPA as "urbanized areas that experience higher temperatures than outlying areas") with areas experiencing various pollution impacts such as a relatively higher presence of airborne particulate matter or contaminated soils. As heat islands were present over most parts of Petaluma, the areas where both categories of environmental impact are present have been highlighted in the colored overlayer.

Map 3 ("Socioeconomic Disadvantages") combines areas of the City where residents experience higher-than-average housing cost burden, relatively low income, and a cumulative "social vulnerability index" (the potential negative effects on communities caused by any external stresses on human health). These factors are mapped by the solid tones. A fourth factor, poor access to grocery stores (defined as residents who live more than ½ mile from a grocery store), shown by the red outline on Map 3, includes two large pockets of residential lots at the right side of the diagram.

Our next step involved creating a 15-minute walk circle and placing it on the map. The radius of this walk circle represents the distance an average person can walk in 15 minutes, or three-quarters of a mile. The diameter of the circles is twice this distance – one and one-half miles – with a star in the center representing a point within the circle that is not more than 15 minutes from every other point within the circle.

Map 4 shows this walking circle centered on Petaluma's historic downtown representing the facts that the historic downtown is most certainly a vital mixed-use district, but that this downtown is well outside the 15-miute walk distance of most of Petaluma's residents – especially those who live in the City's "east end" on the other side of Highway 101. Our mission, then, was to determine how many of these stars – representing potential mixed-use development "nodes" – would be necessary and feasible to include all the map's yellow zones – the City's residential blocks.

After covering the City with these planning circles so that all residential blocks were included, we needed to shift the nodes as shown in Map 5 according to two important principles adopted uniquely for this exercise. Our proposed locations for development nodes:

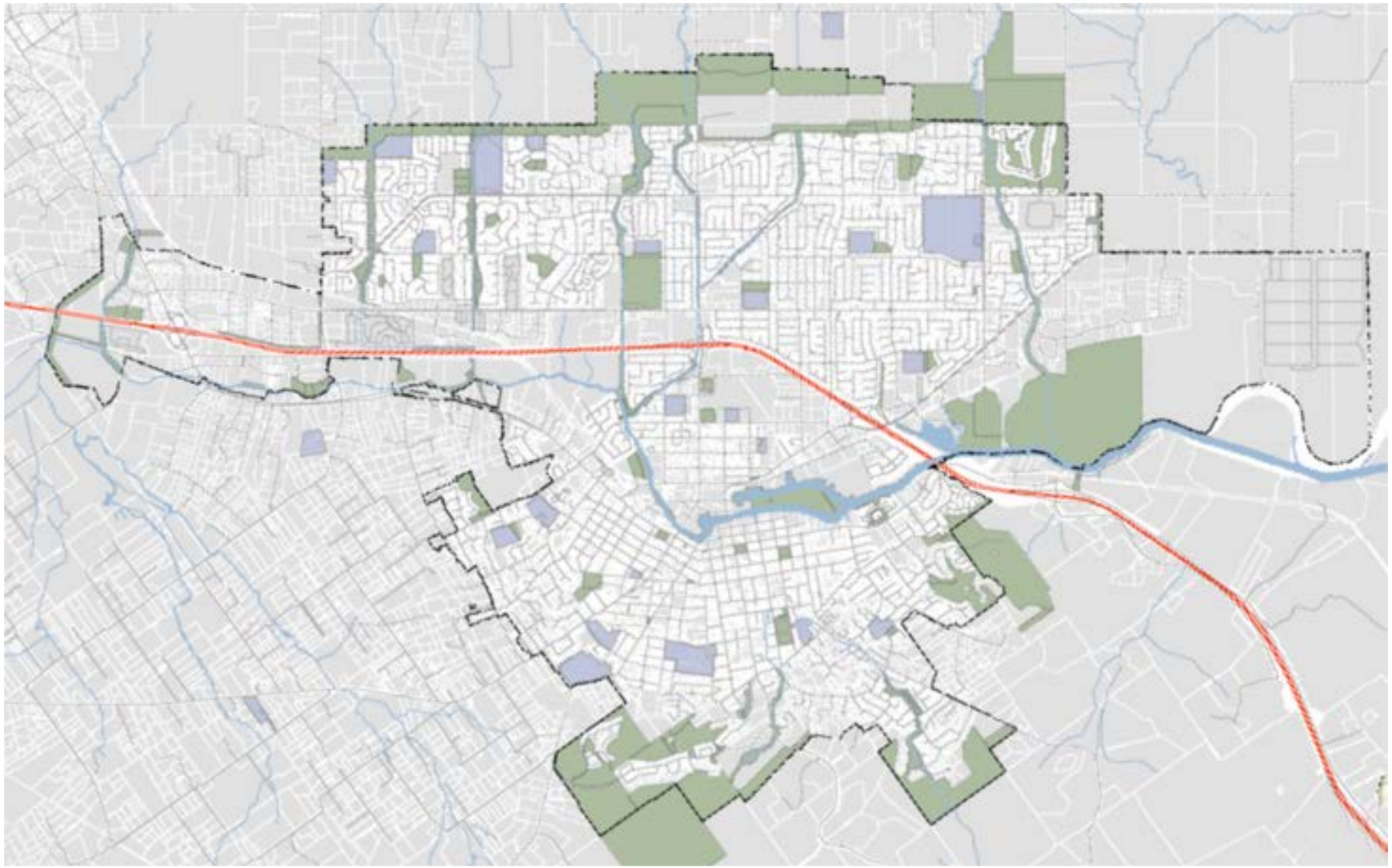
- Do not displace any existing residential units thereby making the locations equitable;
- Are located where existing commercial uses and/or underutilized open space already existed thereby making the locations more feasible.

From this study, we determined that nine of these potential mixed use development nodes would be needed to provide equitable and feasible 15-minute walkable access for perhaps 95 percent of the City's residents. After going back into the City with cameras and maps and finding exact locations for these development nodes, we then assigned them priorities based on the overlayed socioeconomic and environmental impact data of Maps 2 and 3 (see Sketch 1). Map 6 identifies these nodes and prioritizes them.

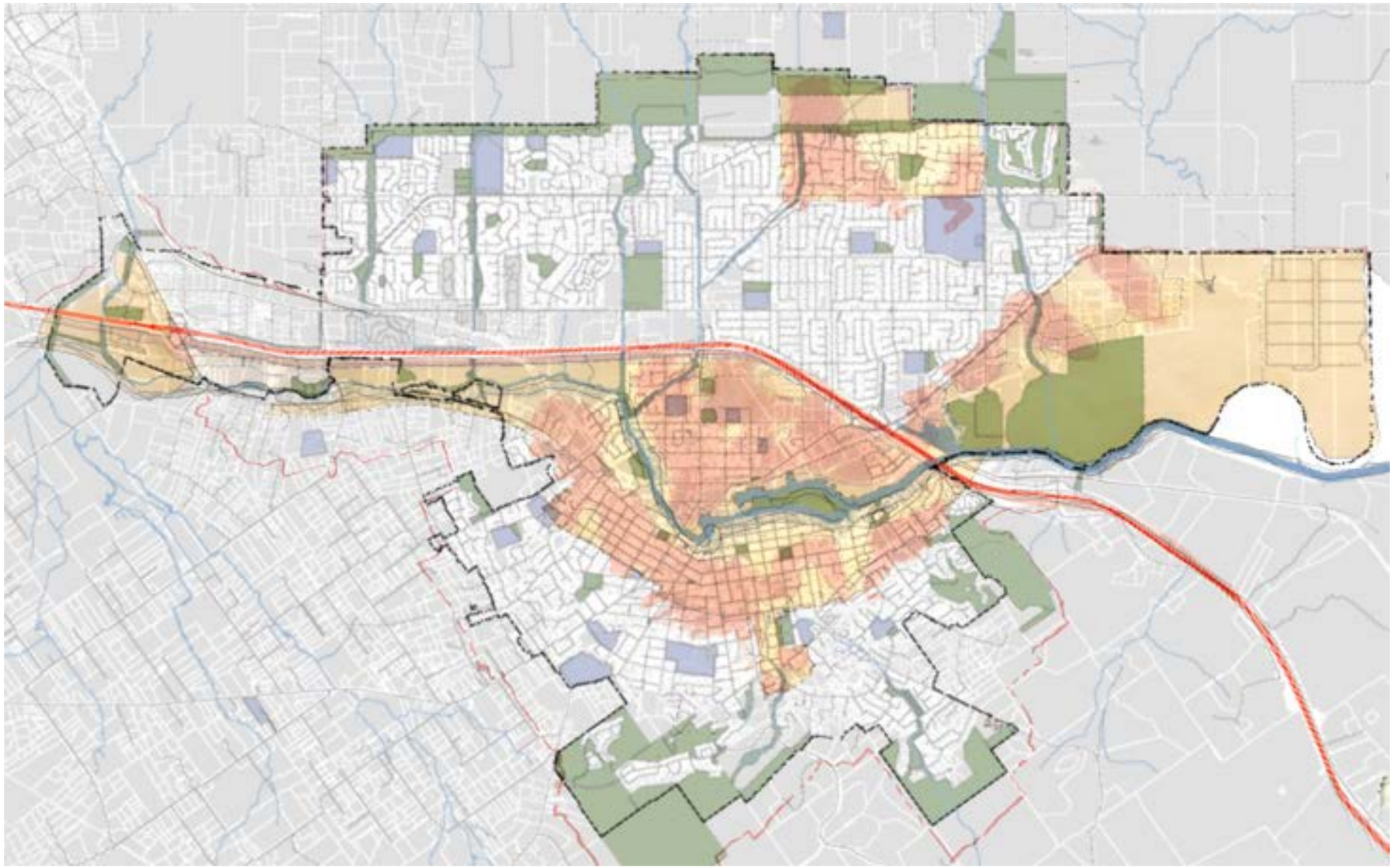
Recommended Nodes

We have classified these nine development nodes in five "tiers". Node 1 is the highest priority development site. Nodes 2A, 2B, and 2C are critically important to achieving Petaluma's goal of becoming a 15-minute city. Nodes 3A, 3B, and 3C present clear opportunities for equitable growth. Development at Node 4 would be advantageous; Node 5 represents a site that needs only minor improvement.

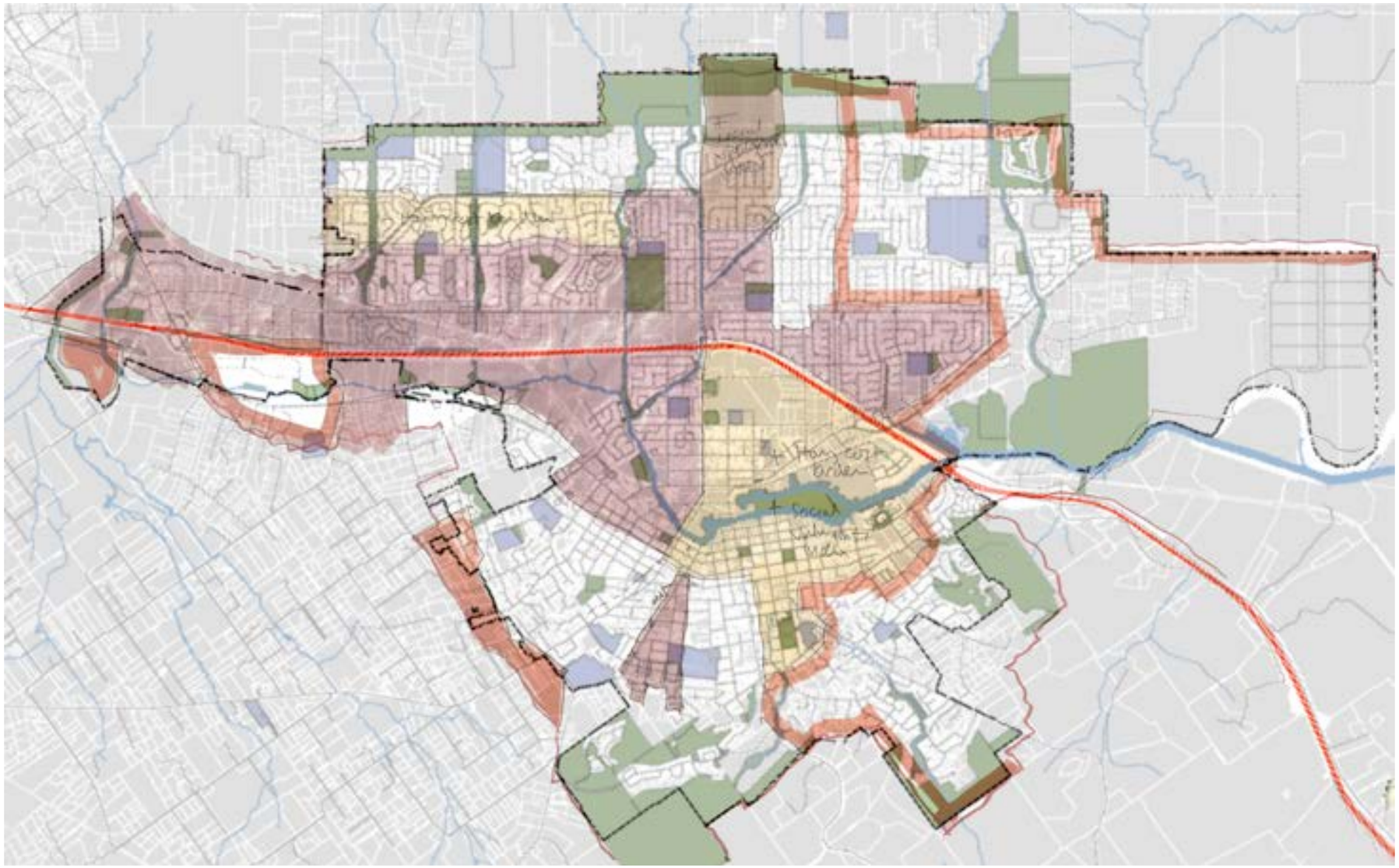
For purposes of this report, we will describe the four nodes in Petaluma's East End first, the three nodes in Petaluma's West End second, and conclude with the two nodes in Petaluma's Midtown.



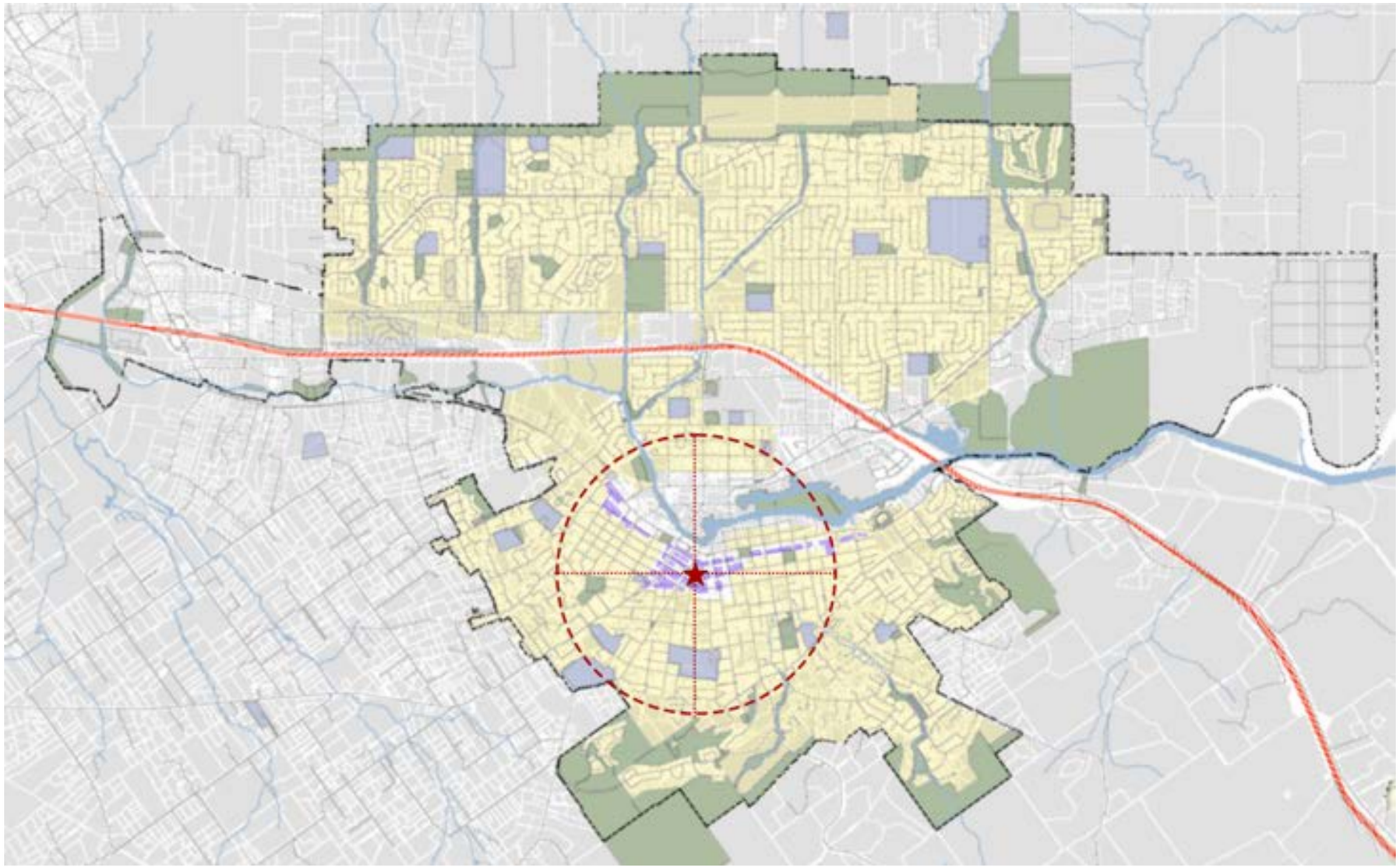
Map 1: Base Map.



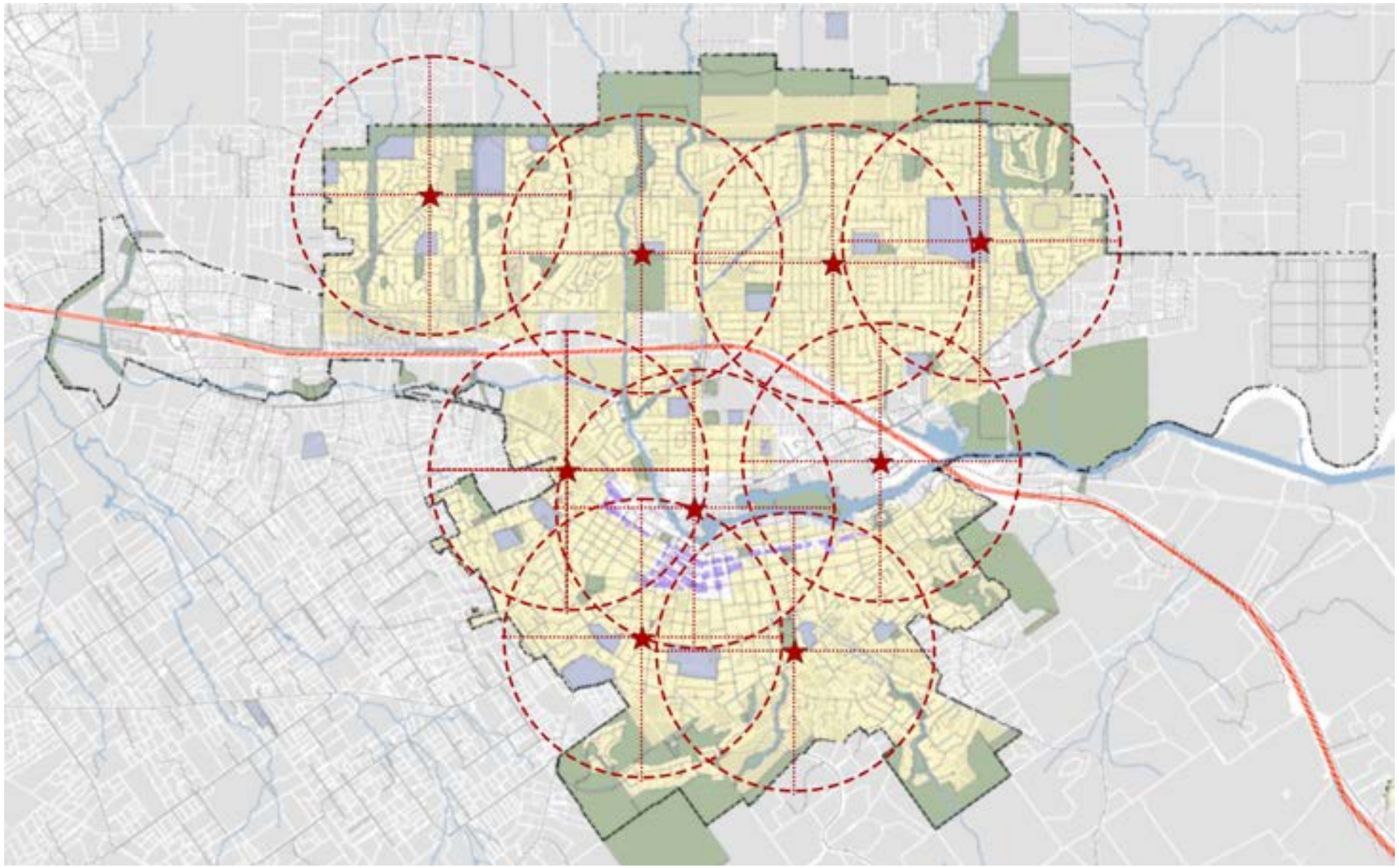
Map 2: Environmental Impacts Overlay.



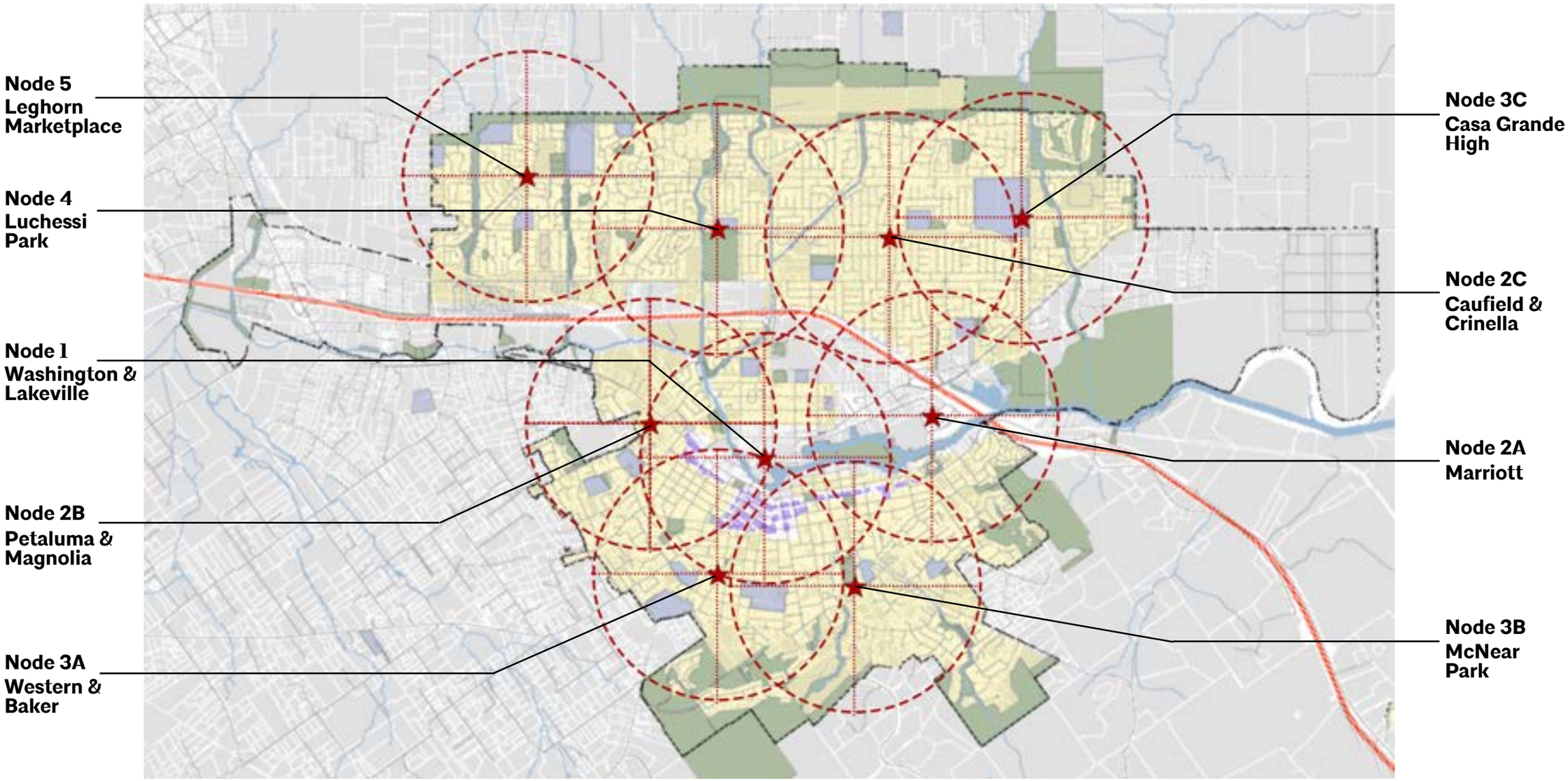
Map 3: Socioeconomic Disadvantages overlay.



Map 4: 15-minute walk circle overlay.



Map 5: 15-minute walk circle nodes



Map 4: 15-minute walk circle nodes identified.

The East End Nodes

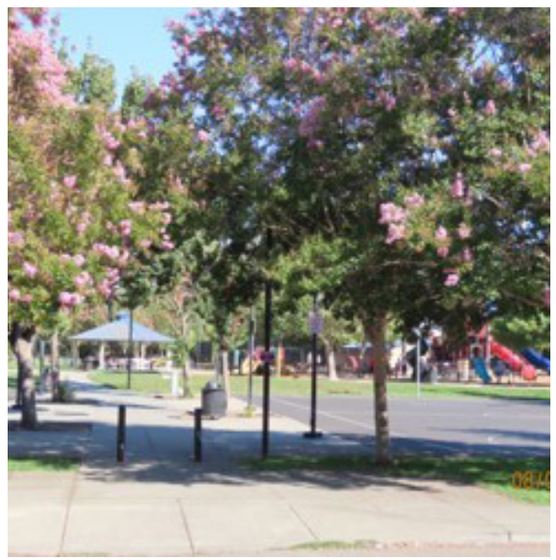
Node 5: Leghorn Marketplace

Although many of the residents of the East End's northeastern neighborhoods experience higher than average housing cost burden and other types of social vulnerability, they also already live within a 15-minute walk of an existing mixed-use center called Leghorn Marketplace. As a model for the type of development we would like to see in all the nodes, this center only lacks affordable housing as a program element. It has a grocery store, several restaurants, and is adjacent to a public playground. The dental office being among the currently vacant buildings, a re-leasing strategy should focus on health and human service functions. Pedestrian access to the center is currently challenging; redesigning Sonoma Mountain Parkway as a greenway would certainly improve that.

Node 4: Lucchesi Park

This is one of three nodes where the DAT team had difficulty finding an appropriate development site, but as many of the residents of these East End neighborhoods also experiences higher than average housing cost burden and other types of social vulnerability, we believe some equitable development would have great public benefit here as well. Not wanting to displace housing or schools, we opted in this case to associate a mixed-use node with an existing public park. First, we identified the Boys & Girls Club of Petaluma on Maria Drive a potential non-profit partner. The Boys & Girls Club headquarters building occupies a large site; it could be redeveloped as a multi-story mixed use and affordable housing site with the Boys & Girls Club receiving upgraded facilities and becoming party to the building's ownership. Further development opportunity could include the facilities around the Petaluma American Little League field and a mixed-use development on N. McDowell Boulevard possibly associated with the Petaluma Community Center and East Side Farmers Market.

Node 5: Leghorn Marketplace



Node 4: Lucchesi Park

Node 2C: Caulfield & Crinella

This was the most challenging area of the city in which to locate a mixed-use development site. The dense and consistent residential blocks are quite far from any health or human service resources and available non-residential land is rather limited requiring everyone who lives here to drive to practically everything. The small parcel we identified would be appropriate for a new three-story building holding such functions as adult day care, a community health center, and a ground floor corner grocery store. The tenants of the existing building – the Old Adobe Union School District offices – could remain as a tenant, and the site is also adjacent to an existing park, an elementary school and children's day care center. This adjacency would leverage the potential for La Tercera Park for becoming part of a more vital neighborhood center on Crinella Drive.

Node 2C: Caulfield & Crinella

Node 3C: Casa Grande High School

This proposed development site works on a number of levels. First, the only significant socioeconomic disadvantage of this southernmost section of the East End is its poor access to a grocery store. Second, the large underutilized (seemingly abandoned) parcel adjacent to Casa Grande High School is nearly as big as Leghorn Marketplace, and lastly, Casa Grande Road itself is a very inhospitable high speed four-lane thoroughfare. A development on this site would address all these concerns by locating a small format grocery store towards the back of the development site flanked by low-rise restaurant and commercial pad sites with a two-story commercial building on Casa Grande Road. This development would be accessed by the much wider and tree-lined sidewalks that are recommended in this study. The upper office floors of this development could also bring health and human service functions to this neighborhood.

Node 3C: Casa Grande High School

Casa Grande High School node conceptual rendering.

The West End Nodes

Node 2B: Petaluma and Magnolia

This node is not in a geographically optimal location being relatively closer to Petaluma's historic downtown that the others, but we highlight its potential to make the West End more walkable. There are already several commercial uses including a grocery store and a few restaurants as well as several underutilized industrial sites in this area. A zoning overlay district that increases the development floor area ratios and lifts zoning use restrictions could serve as a market signal as to the value of these parcels. Again, mixed use development here should give preference to health and human service functions and low-scale affordable housing. The structures such as grain storage buildings that are part of Petaluma's agriculture heritage should be maintained and celebrated as part of this node's identity.

Node 2B: Petaluma and Magnolia

Node 3A: Western & Baker

Again, although relatively close to Petaluma's historic downtown, this node also has great potential for making the West End more walkable. The restaurants and small market that are here are already destinations. If the large industrial building in this zone could be redeveloped in a way to create more active commercial storefronts along Western Avenue and space could be created to house more types of businesses, this four-block district could become one of Petaluma's most interesting mixed-use nodes.

Node 3A: Western & Baker

Node 3B: McNear Park

This being a relatively well-served section of residential Petaluma without easy development sites, we elected to leverage the popularity of McNear Park by suggesting low-impact development options. Noting that this is also a part of the city with relatively poor access to a grocery store, we chose to imagine food truck parking and pop-up farmers' market stands along G Street to include new commercial facilities for the baseball field. Another development partnership opportunity exists to find a place for a community health center or day care in new facilities for the adjacent Cavanaugh Recreation center.

Node 3B: McNear Park

Western & Baker node conceptual rendering.

The Midtown Nodes

Node 2A: Riverfront Marriott Circle

Equitable, accessible mixed-uses development on this site is critically important to Petaluma's goal of becoming a 15-minute city. The 15-minute walk radius from this point includes neighborhoods that have virtually no pedestrian access to commercial businesses, grocery stores, health and human service functions, or places of employment. And give that more residential developments are being planed around this node, it is vital that a mixed-use commercial center take hold here. They two keys for this happening are: development guidelines and access.

Development guidelines must envision this traffic circle surrounded with mid-rise mixed use commercial building and affordable housing. All ground floor uses mut be active storefronts. A ground floor sublease space large enough for a small grocery store would be ideal; upper floor offices should favor health and human service uses. The circle itself should be re-planned as a hospitable public plaza.

Node 2A: Riverfront Marriott Circle

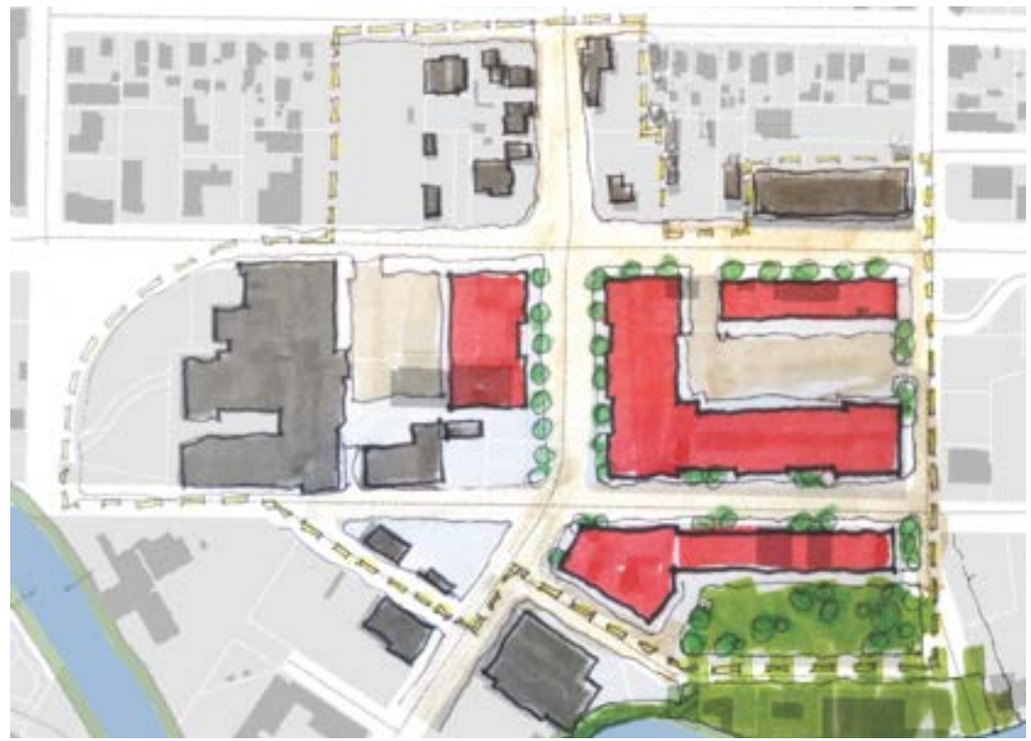
Pedestrian access to and from this space is very important. To serve the residents that live just across the Petaluma River, the bridge over the Petaluma River must certainly happen. Other pedestrian access routes to this site by residents on the other side of Highway 101 would also be beneficial. Finally, this plaza must also provide easy access to the Riverfront Park described earlier in this report.

Node 1A: Washington Street & Lakeville

Washington Street connects Petaluma's East and Wets Ends. It is also Midtown's Main Street. The large empty lots at this intersection are obvious development sites, but it should also be pointed out that the residential neighborhoods within a 15-minute walk of this node are also the most socioeconomically disadvantaged and environmentally impacted areas of the City. Serving the needs of these residents is critical to Petaluma becoming a more equitable and carbon-neutral 15-minute city.

This is the development node with the greatest potential to cross all three of the elements that bisect the City.

It would essentially extend the benefits of the historic downtown district to the East End and – when paired with the improvements to Washington Street described earlier in this report – make Petaluma a model for intentionally sustainable development. Two hundred affordable housing units could easily be planned for these sites all with walkable access to Riverfront Park. The five-story building shown in our rendering are the minimum development density and an overlay development district boundary could include commercial and industrial site for a block in either direction. There is no end to the health and human service functions imaginable on these sites along with space for many businesses.



Node 1A: Washington Street & Lakeville

Marriott Circle node conceptual rendering.

Washington & Lakeville node conceptual rendering.

Sites Not Studied

One of the most important considerations for making Petaluma carbon-neutral is reducing the vehicle miles travelled by both people driving into the City to work who cannot afford to live in Petaluma, and people driving out of the City for jobs that are not in Petaluma. This naturally creates a planning imperative to identify all feasible possible housing sites as well as many feasible office and light industrial sites.

May of these sites were identified in the Urban Land Institute's Technical Assistance Panel Report dated September 17-22, 2020. We agree that the many acres within the city limits currently occupied by shopping malls – especially along Washington Street – are ideal housing and commercial development sites. We find that many of our recommendations are compatible with those of the 2020 ULI TAP, but the assignment given to the AIA DAT was quite different from the ULI Tap's charge. These mall sites and their vast parking lots – as well as the Petaluma Fairgrounds itself – are not where the underserved and car-dependent residents of Petaluma live; simply stated, they were not relevant to our work.

Decarbonizing Petaluma

Decarbonizing Petaluma

Context

In January 2021, the City of Petaluma, CA, adopted a Climate Emergency Action Framework (CEAF) outlining the principles to guide the City's response to climate change, including policies and implementation strategies to adapt, prepare and withstand the projected impacts of climate change.

As part of this framework, the City committed to simultaneously address both the climate and inequity crises, seeking to divest from systems counter to the shared vision of a healthy, sustainable and equitable community.

The vision and principles detailed in the CEAF were further reinforced by the Adopted Operating and Capital Improvement Budget for the fiscal year 2021-2022, in which COVID Recovery, Measure U Implementation and Climate Action, were identified as the "driving forces" behind much of the City's focus for the fiscal year. Specifically, the city budget identified Climate Ready 2030 as one of the top priority initiatives to be funded by Measure U revenues, considered key to help the city reach its goal of becoming a carbon neutral community by 2030.

Community Input

Attendees at the community workshop on August 5, 2022, specified several challenges, assets, and opportunities that informed equitable decarbonization recommendations for Petaluma.

Existing Challenges

- Inequitable treatment of and funding for East and West Petaluma
- Difficulty getting input from Spanish-speaking sectors of the community
- Reducing carbon emissions

Existing Assets

- Several existing programs—such as the Cool Cities Challenge--which are promoting sustainability and adaptation

Opportunities for Action

- Work on better healthcare access for all
- More solar panels and infrastructure
- Prepare and adapt to climate change

Recommended Actions

Prioritize Equity and Environmental Justice

Petaluma's Health and Environmental Justice Analysis (October 2021) offers a thoughtful and detailed description of Petaluma's Disadvantaged Communities[1], as required in California's Planning for Healthy Communities Act (CA SB-1000).

In compliance with CA SB-1000 and consistent with the General Plan and the City's focus on social and environmental equity, the City performed a Disadvantaged Community Screening Analysis based on three sequential methods: 1) CalEnviroScreen (CES) 4.0 index; 2) determination of disproportionate pollution burden in low-income areas; and 3) analysis of community-specific data to determine disproportionate impacts from pollution and other hazards.

According to Method 1 – combining 13 pollution burden indicators and 8 population characteristics – no census tract in the City of Petaluma has a CES 4.0 index score at or above the 75th percentile. In contrast, and as shown in Figure 1, Method 2 – which focuses low-income areas facing disproportionate pollution burden that may lead to negative health effects – identified one census tract (1509.01) and three census block groups (1506.01, Block Group 3; 1506.09 Block Group 2; and 1510.00, Block Group 2) as potential disadvantaged communities.

For Method 3 – which recommends the use of community-specific data to identify disproportionate burden from pollution and other hazards – the city relied on the CDC's Social Vulnerability Index to re-assess the results obtained using Methods 1 and 2.

Through Method 3A, the city identified tracts 1506.01, 1506.09 and 1512.01 Block Group 4, as to be "socially vulnerable" and to have a high pollution burden.

Through Method 3B, the city identified low-income census tracts and block groups with high social vulnerability scores, to compare them to additional indicators of health outcomes, built environment and environmental conditions. As a result, all socially vulnerable and low-income areas were identified as disadvantaged communities.

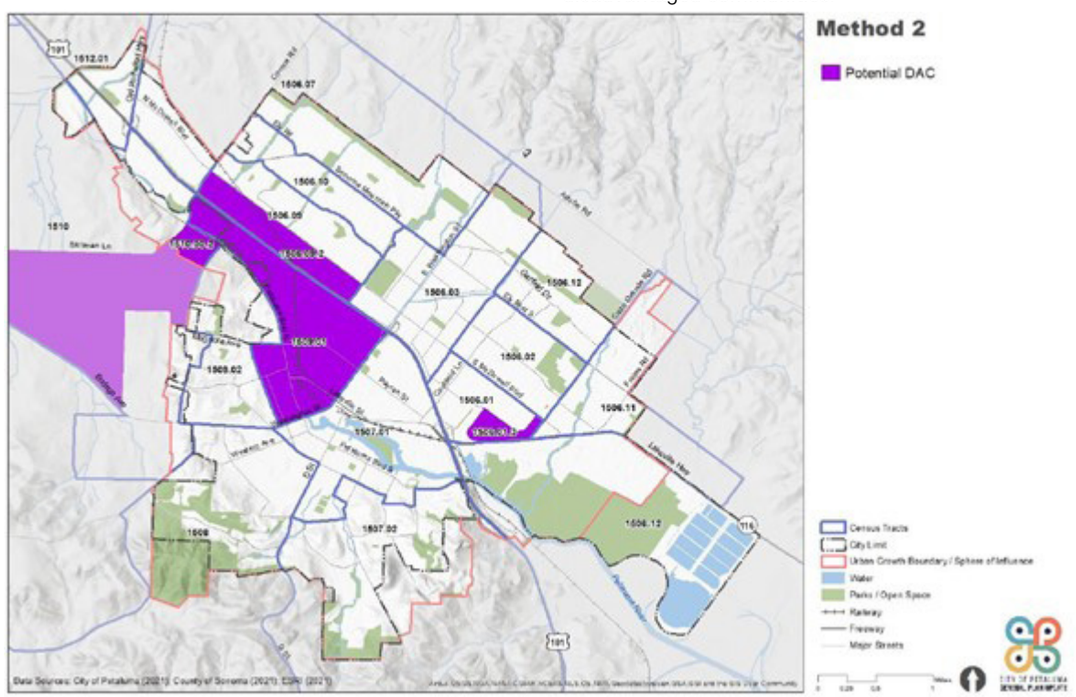


Figure 1: Method 2, Potential DAC.

1. Disadvantaged Communities are defined as geographic areas with a combination of socioeconomic hardship and adverse environmental or health conditions (CA SB-1000).

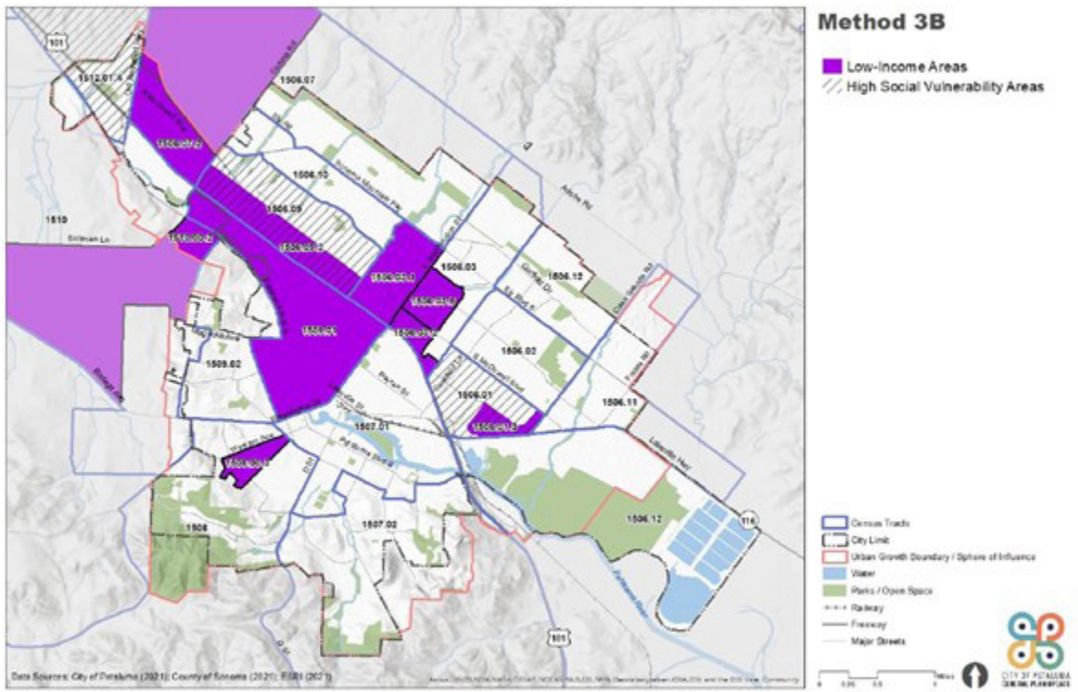


Figure 2: Method 3B results.

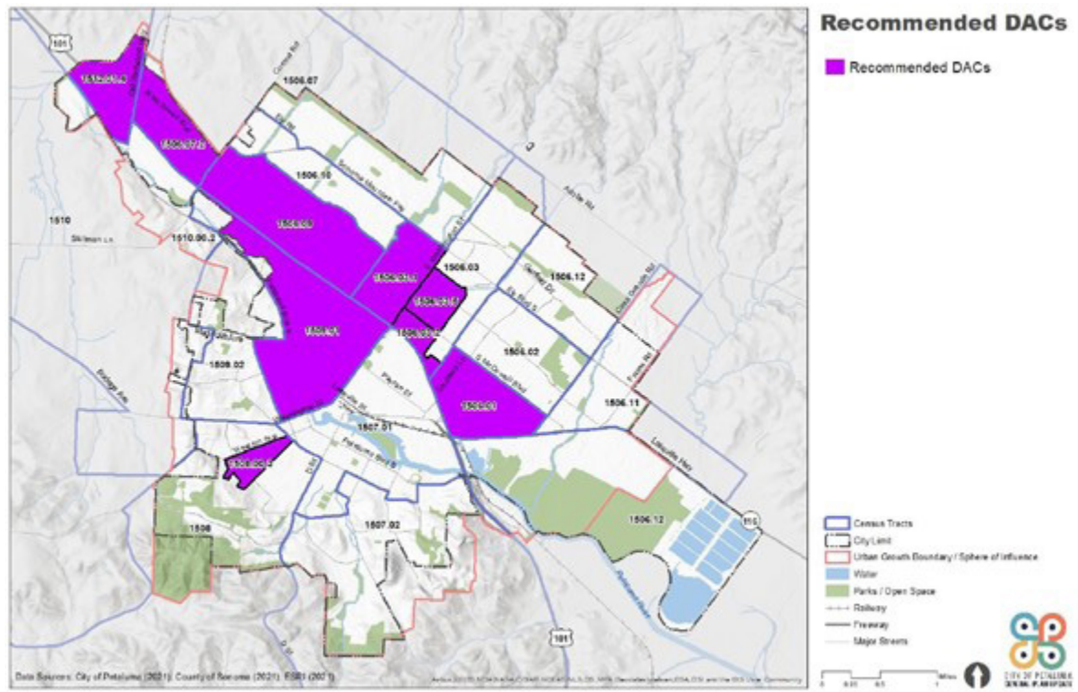


Figure 3: Recommended Disadvantaged Communities.

After combining all three sequential methods, the City determined three Census Tracts (1506.01, 1506.09 and 1509.01) and six Block Groups (1506.03, Block Groups 1, 2 and 5; 1506.07, Block Group 2; 1508.00, Block Group 3; and 1512.01, Block Group 4) as Recommended Disadvantaged Communities, as shown in Figure 3.

Areas of Opportunity

2020 US Census Undercounting

During 2020, the U.S. Census Bureau faced unprecedented challenges, including the COVID-19 pandemic, hurricanes, wildfires and the federal government's efforts to add a citizenship question and stop undocumented immigrants from being counted for apportionment.

At the end, the census count of more than 62 million Hispanics still missed 1 in 20, that is, approximately 5% across the board. This number could be even higher in areas where Hispanic overlap with undocumented immigrant groups, especially those in overcrowded housing areas.

Household Income Inequality

Petaluma's Income Household Distribution, which relies on data from the U.S. Census, American Community Survey, shows an affluent community with a median household income of $91,528, approximately 13% and 22% higher than Sonoma County's and California's median household income, respectively.

About 25% of households reported an annual income over $150,000, in contrast with 20% who reported less than $40,000. A simple statistical analysis may show a negatively skewed household income distribution, where more than 50% of households are at least a standard deviation from the median income, which can be attributed to income inequality among other factors.

COVID-19 Pandemic

The economic fallout from the pandemic continues to disproportionately affect some population groups, including lower-income adults, Hispanic and adults younger than 30[2]. In most cases, this has manifested as job losses and as a reduction in wages, negatively affecting household income. These disproportionate economic impacts reflect long-standing inequities in education, employment, housing, and health care, which when combined with other factors such as pollution burden and specific population characteristics, represent a threat multiplier under the city's Climate Emergency Framework.

In some cases, people who contracted the COVID-19 virus are experiencing long-term effects, known as long COVID. According to the CDC, people who experience

2. Pew Research Center.

long COVID conditions most commonly report tiredness or chronic fatigue, respiratory, heart, digestive and/or neurological symptoms. These conditions are real and may disproportionately affect those currently not considered "socially vulnerable", increasing the effects of pollution exposure, limiting both food access and physical activity, and disproportionately impacting cost-burden and overcrowded households.

Recommendations

1. Consider the US Census 5% undercounting of Hispanic population both in Environmental Justice and Health Analysis and in determining minimum participation requirements in civic engagement.

2. Consider income inequality as a function of income distribution's standard deviation for each US Census Block Group, also in contrast with Sonoma County's or the state's standard deviation.

3. Consider incorporating the compounded economic and health effects of long Covid in Methods 3A and 3B, including those whose ability to find employment or to increase wages has been limited by new long-term care and support responsibilities.

Revisit the Greenhouse Gas Inventory

According to Petaluma's 2018 Greenhouse Gas Inventory, the city emitted 472,422 metric tons of carbon dioxide equivalent (MTCO2e) in 2018, with transportation and buildings as the main sources of emissions, accounting for 67% and 24% of the total emissions, respectively (see Figure 4).

Energy from residential and nonresidential (including commercial and industrial) buildings was calculated by adding emissions from both electricity and natural gas services. Emissions from electricity, which accounted for 24,177 MTCO2e, were calculated based on the electricity emissions factor provided by suppliers, including PG&E, direct access, Sonoma Clean Power Start and Sonoma Clean Power Ever Green. Emissions from natural gas were estimated from activity data by applying an emissions factor. In total, emissions from natural gas accounted for 90,297 MTCO2e.

Community Sector	Subsector	Subsector $MTCO_2e$	Sector $MTCO_2e$	Percent of Total
Transportation	On-Road Transportation	314,493	314,493	67%
Energy	Residential	60,409	114,475	24%
	Nonresidential	54,065		
Solid Waste	Residential	12,669	33,137	7%
	Commercial	20,468		
Transportation	Off-Road Transportation	9,727	9,727	2%
Water and Wastewater	Water Use	73	590	0.1%
	Wastewater Treatment	517		
Total		**472,422**		**100%**

Source: RCPA 2018 Sonoma County Greenhouse Gas Inventory and Raimi + Associates.

Figure 4: Total Annual Community GHG Emissions (2018).

Areas of Opportunity

Scope of Emissions

The City of Petaluma's GHG Inventory combines Scope 1 and Scope 2 emissions to determine carbon emissions from energy use inside buildings. While consolidating Scope 1 and Scope 2 emissions may simplify reporting, it may also hide the specific impact of natural gas and associated methane emissions. The separation of Scope 1 and Scope 2 may provide a more accurate representation of the impact of emissions mitigation strategies, such as building electrification.

Fugitive Methane Emissions

There is new evidence that methane emissions from energy use inside buildings that depend on natural gas for cooking, heating or drying clothes, can be significant due to leakage, venting prior to ignition and burner malfunctions.[3] These methane emissions, spread over the structures that are hooked up to gas lines, may be cumulatively significant in terms of climate damage.

Advanced Methane Accounting

New advanced methane accounting for natural gas appliances[4] indicates that fugitive methane emissions, as a percentage of CO2 emissions calculated using activity data and emissions factor, may be estimated to be over 50% of total CO2 emissions. Should advanced methane accounting for natural gas appliances be used to estimate emissions from energy use inside buildings in Petaluma's GHG Inventory, emissions associated with natural gas alone would account for approximately 35% of the total emissions in the city.

Recommendations

1. Consider separation of Scope 1 and Scope 2 emissions in both residential and commercial buildings.

2. Consider advanced methane accounting (i.e. fugitive emissions) when calculating emissions from energy use inside buildings.

Focus on Mitigation and Sequestration

According to the City of Petaluma's Climate Emergency Framework, the City has established a series of goals to mitigate greenhouse gas emissions. Among those goals, the city has set out as top priority to eliminate emissions from transportation, energy use inside new and existing buildings and waste. It also includes the goal of reducing consumption emissions to the level necessary to meet the City's climate goals.

3. U.S. Methane Emissions Reduction Action Plan, The White House Office of Domestic Climate Policy, 2021.
4. Patricia M. B. Saint Vincent & Natalie J. Pekney. Beyond-the-Meter: Unaccounted Sources of Methane Emissions in the Natural Gas Distribution Sector. Environmental Science & Technology (2020).

Areas of Opportunity

To effectively reduce greenhouse gas emissions from economic activity, the City of Petaluma needs to assess the impact economic activity, as of today, has on climate change. For this, three metrics are useful: energy intensity[5], carbon intensity[6] and energy-related carbon emissions, which when combined with population and GDP per capita are known as the Kaya Identity[7].

When substantial reductions in energy intensity and carbon intensity occur, as in the first year of the COVID-19 pandemic, then the only reason for emissions to increase could be attributed to changes in population and the redistribution of organic and material waste.

While the City of Petaluma has managed to reduce carbon intensity by increasing participation of clean electricity through Sonoma Clean Power, it still needs to address emissions from natural-gas powered energy use inside residential and non-residential buildings. This is of specific importance in the short term when considering 20-year global warming potential of fugitive methane emissions[8].

According to the White House of Domestic Climate Policy, building electrification represents the most effective solution to address emissions from energy use inside buildings. The US DOE recently launched a national initiative focused on deploying clean and efficient building heating and cooling systems, and for the development of new appliance and equipment standards to advance heat pump technology and induction stoves.

Even though transportation is the number one source of carbon emissions for the City of Petaluma, it is important to recognize that a strategy focused on the replacement of internal-combustion engine vehicles may not be immediately viable. However, a strategy focused on reducing number of vehicle miles traveled (VMT) and increasing the overall efficiency of the city's transportation systems, may lead to a substantial reduction in carbon emissions.

It is our estimation that by **Reimagining Mobility** and incorporating the recommendations to **build 15-minute neighborhoods**, the City could eliminate as much as 25% to 30% of its transportation-related emissions.

5. Energy used per unit of GDP.
6. CO2 emissions per unit of energy.
7. U.S. Energy-Related Carbon Dioxide Emissions, 2020, EIA, December 2021.
8. https://www.epa.gov/ghgemissions/understanding-global-warming-potentials

Recommendations

1. Electrification: Consider as top priority the electrification of residential, commercial, and industrial buildings, assessing the City's current needs in terms of capacity and infrastructure, and the economic benefits of scale and co-deployment of technologies such as solar, energy storage and EV charging infrastructure.

2. Energy Intensity in Transportation: Consider a holistic approach to an integrated, multi-modal transportation system, seeking to maximize efficiency and reduce VMT in passenger vehicles. Further incentivize the transition to electric vehicles by deploying both Level 2 and Level 3 charging infrastructure, considering equity, accessibility and affordability in its design and deployment strategy.

3. Enabling Infrastructure: Prioritize work with the distribution utility company to model future electric loads and anticipate necessary infrastructure upgrades, considering a phased approach to electrification, also considering fluctuations in efficiency of batteries and heat pumps.

4. Data Collection and Flexibility: Prioritize data collection (smart meters and thermostats), grid flexibility and interactivity, while designing resiliency measures such as microgrid interconnection, in coordination with the distribution utility company.

5. Workforce Development: Determine skill and capacity development needs, considering potential job and career pathways for disadvantaged communities, including other vulnerable groups such as undocumented immigrants, formerly and currently incarcerated.

6. Regional Cooperation and Support for Wraparound Services: Develop a multi-regional approach to workforce development support, including wraparound services such as child-care, transportation, language support and employer certification, in collaboration with Sonoma County and other municipalities near Petaluma.

Financing:

1. Develop a strategy to increase private and philanthropic participation for the development of affordable energy efficiency and electrification financing options.

2. Rely on the state government and philanthropic organizations to provide city-wide loan loss reserve and loan guarantees for low-income individuals, as well as those without or with a limited credit history, expanding access and participation of disadvantaged communities.

3. Use the government's convening power to enable industry consolidation, scale and bulk purchasing power.

4. Develop a strategy to aggregate small-scale electrification projects, in order to incentivize participation of private investors, including local credit unions and CDFIs, in the development of a comprehensive solution to upfront and minimize capital expenditures.

5. Consolidate state and federal incentives to maximize efficiency in incentive, grant and rebate allocation, and to reduce the overall cost of capital.

Develop an Adaptation and Social Resilience Strategy

As the City of Petaluma begins to plan and prepare for the immediate and long-term impacts of climate change, it also seeks to develop an adaptation and resilience strategy, capable of forecasting and addressing the simultaneous and compounding effects of current and future economic and health crises.

In the case of disadvantaged communities, climate change impacts can take the form of threat multiplier, especially in those communities already disproportionately experiencing the effects of the current global economic crisis or the prolonged health and economic effects of the COVID-19 pandemic.

Recommendations

1. Consider developing a strategy to address BOTH climate adaptation and economic resilience, focusing on bolstering the city's ability to withstand the effects of climate change – including flooding and fire risks, heat waves and uncharacteristically cold winters – and anticipate the subsequent economic shock.

2. Promote business continuity, preparedness and the development of a resilient workforce and skill training programs, to mitigate the individual and regional impacts of industry and core employment shifts, following the compounded effects of climate change and economic downturn.

3. Establish information and knowledge networks, focused on education and preparedness, with the objective of boosting pre-disaster recovery planning and developing post-disaster responsive capacity.

4. Increase local short-term responsive capacity to predictable climate events such as heat waves, uncharacteristically cold winters, flooding and fire, by developing multiple city-managed cooling centers and winter shelters within 15-minute neighborhoods.

Standardize Community Engagement

According to the Climate Emergency Framework, “the Climate Emergency Resolution has elevated community engagement on climate change to a top policy and planning priority.” A process of democratic engagement, focused on increasing participation of vulnerable groups and disadvantaged communities, may lead the City of Petaluma to a comprehensive community engagement process, where all members of the community may share a common sense of purpose and ownership of the potential solutions to the climate and economic crises.

Recommendations

1. Strengthen democratic engagement by promoting bottom-up citizen participation (as opposed to a top-bottom approach driven by government), allowing for residents of the city to first informally, and then through a formal process of engagement, drive community participation in the definition, design and implementation of policy programs.

2. Enable community-based organizations and community champions to fully represent vulnerable groups, including disadvantaged communities and communities by affinity, to voice their concerns, articulate their needs and help accelerate community wealth building.

Financing a Greener Petaluma

Financing a Greener Petaluma

A path to Implementing a 15-minute City

As a smaller city, Petaluma has enjoyed a range of attributes lacking in many of its peer cities. Among these are retaining and maintaining a vibrant historic downtown; having a variety of industries, businesses and entrepreneurs; a river flowing through the central city; and access to mountains and world acclaimed vineyards and wineries.

It also has challenges, including having such a high cost of living that most of it employment base has to commute in from elsewhere; a growing Latino population that is more economically disadvantaged that the larger majority population; infrastructure that isn't people friendly (such as wide streets that carry abundant and rapid vehicle traffic); and insufficient shade from increasingly hot sunny days.

Fortunately, city leadership, many community residents, and businesses recognize that there's a need to craft a more sustainable, equitable, people-first city, one that improves both the natural and physical environment in addition to offering greater opportunities to house and employ residents across the socio/economic spectrum. As Dr. Martin Luther King observed, "The time is always right to do the right thing". For Petaluma, that time is now.

The city is already making progress in doing the right thing. It has prepared an abundant, robust data base about current conditions with regards to the economy, housing, and environment (as well as other factors.) These documents, as well as various available white papers, provide a reality check of where Petaluma is today – which is well ahead of many cities, small and large.

Doing the right thing by the environment (both natural and built) and ensuring a more resilient economy for current and future residents of all backgrounds involves:

- A City leadership committed to a long-term improvement agenda (implementation of which is phased);
- Community input into crafting a vision for the future and maintaining support for the approved vision;
- Identifying and securing private, institutional, and non-profit partners willing and able to collaborate in both short and longer term built and natural environment sustainable and equitable improvements/opportunities;
- Having sufficient, capable public agency staff who collaborate on agreed upon priorities and can execute a variety of policies and programs;
- Identification of vacant and underutilized sites (public and private) to accommodate desired sustainable growth;
- Developing measurable, realistic markers for achieving objectives, recognizing that unexpected conditions (recessions, inflation, natural disasters) are always possible and will require adjustments to these markers;
- Embracing and being willing to use a robust development funding tool kit and other creative land use options to achieve envisioned outcomes.

Current progress & ingredients for next steps

The city has already begun to position itself to achieve a more sustainable and equitable future. A number of environmental and economic justice/equity efforts have been launched, as noted in the city's draft general plan and other documents. Leadership seems to be generally on board to more aggressively pursue this type of future with the community. Working toward a 15-minute city is one of the tracks that leadership has expressed interest in achieving. To advance this agenda, it will need to better refine and prioritize its objectives and craft policies as well as funded programs to help achieve this desired future. Essential implementing partners in the private, non-profit, other public agencies (county/state), institutional sectors in addition to inclusive community representation also need to be incorporated as key actors as each of these sectors offer needed assets (e.g., land, funding, education).

Incrementally implementing a 15-minute city plan

The DAT team has produced a very ambitious set of improvements and draft concepts that can help guide Petaluma's deliberations about solidifying clear objectives and priorities to advance the realization o a 15-minute city.

Achieving a 15-minute city will also necessitate making a range of significant public and private financial investments in addition to regulatory changes along with required community outreach (to assure that the projects and programs being proposed are viable and benefit the constituents they're intended to serve).

This report section focuses largely on funding options that Petaluma may not be currently employing, may not be utilizing as extensively as it could, or that it may have tried formerly without success. It also suggests exploring alternative land use approaches and potential options for denser multi-family affordable rentals and moderate-income home ownership, as well as start-up or micro commercial spaces. The funding option list presented is not exhaustive but offers a wide array of potential resources.

In determining which if any of the alternative resources could be useful in Petaluma's pursuit of more sustainable, equitable 15-minute city, it would helpful to assess each option with a feasibility filter to assist in determining whether it merits further pursuit. One such filter is offered below. You may choose to use/modify some of these elements or create a different set that better meets the needs of leadership and the community.

Feasibility filter

- Legality. If the tool is currently prohibited by state statute, then there is often a very large administrative hurdle to be surmounted up front. All the benefits of a funding mechanism are negligible if the mechanism is not legal or cannot become legal within a desired timeframe. Even for mechanisms that are legal, the likelihood of legal challenges adds to the cost of implementing them.
- Efficiency. The usefulness of a funding mechanism is dependent on how much revenue it can generate (capacity), when the revenue will be available for use (timing), how easy it is to collect the revenue (administrative ease), whether it will avoid large fluctuations in collections (stability), and how many types of projects can be funded by it (flexibility).
- Fairness. A simple definition of fairness in public finance is that users should pay for benefits they receive or costs they impose, unless they are in groups that have been singled out for special treatment (e.g., low income, elderly, physically and/or socioeconomically disadvantaged). Fairness may also be defined as requiring a nexus between fees imposed on development and the expenditure of those fees. Fairness is a judgement call.
- Political/Community Viability. The adoption of funding tools requires an enactment by elected officials, and the usage of a tool may require voter approval for the tool and/or each project. Thus, community input, public opinion and perception of the funding mechanism matters for implementation. Political viability is also a judgement call.

We realize that the city has been aggressively pursuing various state grants and other competitive resources – which it should continue doing. For the most part, these sources are not included here as the city is already familiar with them. It's also important to keep in mind that many of the sources listed can be blended on differing projects to optimize project viability.

Recommended Funding Sources

Alternative Funding Sources

Requirements, Fees, and Taxes

Petaluma already has funding and financing tools that rely on land and building values (e.g., property tax, building permit fees) to fund government expenditures. Some one-time fees or taxes relate to change in real estate values, while others collect regular payments based on land values. Moreover, there are non-financial requirements that restrict how land can be used. There also are funding tools that are or may not be used in Petaluma but have been adopted by other cities and counties.

Construction or Building Excise Tax

This is a tax on the permit value of new construction which goes above and beyond permit fees that recoup the cost of staff review time. This tax captures part of the value of new construction which is then used to fund public priorities such as affordable housing and public facilities (e.g. streets/sidewalks, open spaces). The tax revenue this generates is flexible and does not have to be closely related to the actual cost of providing public facilities to serve the development, nor does it have to be spent to specifically benefit the properties being taxed. It can be very effective for denser sustainable multi-family mixed-use projects, and commercial development projects.

Sole Source Impact Fees

Petaluma currently collects impact fees that are imposed on new developments by local government for the purpose of providing new or expanded public capital facilities required to address the additional demand from the new development. This fee income is allocated for citywide infrastructure improvements. In some states, sole source impact fees provide an option that enables the impact fees to be allocated to a smaller geographic area which could be a few to a few hundred acres depending on the development project. These fees are most often used for denser development projects and can be applied to park and other open space development as well as hard infrastructure in the impact fee generating area.

Land banking & Community Land banks

Land banking and community land banks benefit the surrounding communities by removing land from the market and preserving it, ensuring the availability of long-term affordability and land access (e.g., parks and other public spaces). Petaluma already has one or more non-profit land banks, which are a strong asset. Community Land banks add a significant dimension of enabling affordable housing tenants and condo/coop owners to share in wealth creation generated by leasing some of the land for market rate housing or commercial facilities. Acquiring and holding land in prime locations, such as sites that may no longer be used by school districts, hospitals or counties (e.g., the fair grounds) could enable considerable affordable multi-family, mixed-use development and public open space development. Larger sites may provide a very significant opportunity for economic equity; a focused community land banking demonstration project for public open space could also be incorporated.

Moderately Priced Dwelling Unit (MPDU) Requirement

Petaluma currently has inclusionary zoning the requires developers to either provide a percentage of affordable rental units on site or pay a fee in lieu. MPDU requirements address inclusionary zoning programs with the goal of providing affordably priced townhomes and condominiums – both new and resale – to first-time homebuyers who have a moderate household income. This type of requirement would ensure that condo developers would be adding ownership opportunities to workforce household.

Parking Fees

Parking can be either off-street parking in the form of garages or lots and metered on-street parking. Revenue generated could be appropriated to fund public improvement projects. One example is the use of parking fees to help fund a core area streetcar line.

Public Land Disposition

Public land that is not already programmed for other uses (schools, parks, firehouses, police stations, etc.) could be sold or leased to developers to help achieve development objectives. For example, this land may be developable as sustainable mixed-income housing once it is sold or leased to a developer. The public agency owning the land can place conditions on uses, but this process can still increase land values as underutilized properties are redeveloped, thus stimulating local real estate markets. It can be employed to test demonstration developments such as using mass timber construction, or for mixed-use projects requiring affordable ground floor commercial spaces. If the latter conditions are required, the land price or lease cost may be reduced to enable the desired outcome, and other tools mentioned in this report may be needed.

Land Swaps

The City is fortunate to have control of many acres of land. This situation puts the City in a position where it can, if it and a willing private party have interest, swap ownerships for sites that the city believes would be better for it to control while still providing a fair value exchange of property with the current private owner. This alternative may be beneficial in moving toward implementation in the City's SMART area as well as waterfront redevelopment interests. It may be in the best interest of both the City and the private owner of the SMART area parcel for the latter to swap for other public land and let the City proceed with redevelopment of both SMART parcels. Swaps may also be beneficial for the waterfront redevelopment so that denser mixed-use projects can be developed there along with a protected waterfront and public open space. Both public and private parties would need to complete due diligence on the parcel exchanges and work to achieve fair values for their properties based on appraisals.

Targeted Transient Lodging Tax

Petaluma already has a Transient Occupancy Tax that must be used to promote tourism and tourism related facilities. Some cities add a targeted lodging pertinent element to these taxes. This added increment generates more tourist revenue that could be used for broader goals around equitable economic development and/or housing affordability – both of which benefit service tourism service workers among others.

Development Incentives Combined with Requirements or Fees

Changes in land use, development rights, or infrastructure can make certain areas more desirable for development. Petaluma and Sonoma County governments can capture the value development incentives create by combining them with certain requirements or fees. Public policy goals can be more easily achieved with the revenue generated from the fees if the development incentives are large enough to result in more valuable development.

Fee for Development Rights

If allowed by law, developers can have the option of paying fees to access additional development rights, such as an increase in allowed density, a reduction in parking requirements, or ground/air rights (the latter of which may be transferable). These development rights could make projects more feasible. A portion of the added value is captured in the form of fees, which can then fund public infrastructure, or be directed toward off site affordable housing, or equitable economic development activities.

Public Benefits for Development Rights (e.g.: Right of Way Contribution)

Developers may access additional development rights such as a density bonus or an expedited permitting process by contributing privately or publicly owned land that is needed for the public infrastructure. The contribution can include right-of-way areas, facilities to support transit services, bike lanes, etc. The government is required to negotiate with the developer on the terms of the contribution. Petaluma may already be engaged in utilizing this program. A new program like the MPDU can also be considered a form of public benefit that can be required for additional development rights.

District-Based Strategies

When the benefits of a public investment are reasonably limited to a specific geographic area and the benefiting entities can be easily identified, local governments can establish special districts from which new funding sources can be generated. The creation of these districts and their boundaries are often dependent on the development potential. Once a district is established, its landowners pay assessments or taxes that finance the costs of projects that generate shared benefits. The assessments or taxes may be proportional to the estimated share of benefits each entity receives.

The establishment of a special district and the funded projects within it creates value that is reflected in increased real estate prices. Capturing a portion of the increased value is necessary to finance the projects and even fund other projects. If these projects would otherwise not have occurred or would have required public funding, they can be considered public investments.

Special Assessment Districts (e.g., Business Improvement District, Community Improvement District, Local Improvement District)

Special Assessment Districts involve the creation of districts that generate tax revenues from properties that benefit from a public infrastructure improvement. In general, businesses or new developments in the designated area would pay special assessments in addition to existing taxes to fund new public infrastructure. Petaluma already has a BID, and state enabled Mello-Roos special assessment districts can be used to pay for an array of public improvements in such districts but we understand that these have been difficult to use since the added assessments passes on with property sales until the bonds are paid off. They may however be more viable for denser multi-family development projects that would benefit from various public improvements (e.g., open spaces, bike paths, street trees).

Tax Increment revised funding

California now offers a range of incremental tax investment options to replace the recently extinguished Urban Renewal District TIF program, including Community Revitalization and Investment Authority, Infrastructure Financing District, and Enhanced Infrastructure Financing.

Infrastructure and Refinancing District

We understand that Petaluma currently has a Community Revitalization program but it relies only on collecting the City's portion of incremental growth so it doesn't have ample funds. It may be worth exploring the other tax increment options in conjunction with the county assuming that the latter can be convinced of the larger benefits that it can bring to that jurisdiction. Funds can be used for affordable housing, public infrastructure (e.g., bike lanes, street improvements such as road diets, parks). (See appendix 1 for more on these options)

State enabled and other funding tools

There are a range of tax-exempt development funding tools offered by the state. Petaluma developers are likely already tapping into some of these such as the Low Income House Tax Credits. Other programs are geared toward enabling more sustainable housing development. A few of these are listed below.

501(c)3 tax exempt Bonds

501(c)(3) Tax Exempt Bonds (issued by the California Finance Authority) are revenue bonds issued at tax exempt rates for a range of tax-exempt uses that can include eligible medical facilities, senior housing, for and non-profit lower and moderate income housing, etc. The key benefit of this funding source is that these bonds can pay for up to 100% of the development costs which means that a project doesn't have to have expensive equity requirements which increase project costs. Projects do need to have sufficient revenues to repay the bonds.

C-PACE sustainable development financing

C-PACE is a program that offers financing for multifamily development projects that utilize sustainable building materials (e.g., mass timber, solar roofs, energy efficient windows) in an effort to reduce carbon footprints. C-PACE financing covers 100% of the developmental hard and soft costs for market rate or mixed-income multifamily projects, thereby reducing the developer's need to secure expensive equity. Based on recent discussions, it appears that this program is either being used very little or not at all in Petaluma even though it's listed in the tool kit. Finding ways to promote the program among lenders, developers, and relevant city personnel could enable the development of more sustainable housing.

Crowd Funding

Crowd funding is a collective effort by individuals to raise funds for a variety of causes, projects or business ventures they care about. Crowd funding, whose participants are often solicited via the internet thereby casting a wide but inexpensive network, has been used for help to fund start-up businesses, political campaigns, and development projects. Recently, a small town in Wales raised over $1million to finance a community center. It has also been used to raise funds for sustainable office and housing developments. Depending on the project, crowd funders may or may not necessarily seek a direct return on their investments.

Additional Needs to help achieve a 15-minute city

Working toward a more sustainable and equitable 15-minute city will benefit from enabling other changes. A few are listed here.

- Parking code changes. To help achieve higher density housing on urban sites, parking ratios need to have lower maximums. The current 2 spaces per unit requirement makes the development of 5 and 6 story housing projects with active ground floor uses very difficult. Petaluma currently has achievable rents to support higher density building but these will be more possible to construct with a parking maximum of 1 space per unit. We understand that Petaluma is considering this and strongly suggest that it be codified.

- Enhancing mass transit capacity and ridership. It would be useful to find ways for the existing mass transit agencies to create a seamless transit system amongst them. This could take the form of developing one unified "ticket" that can be used for any of the current operating systems. Providing subsidized tickets by public and private employers would be helpful in both enhancing ridership and reducing single use auto traffic. This would better enable devoting more right-of-way to bikes.

- Explore innovative programs with ride sharing entities. This can take the form of having private and public employers enter into contracts with ride sharing services for a reduced cost to the employees.

- Assess the potential for Co-op housing. Co-ops have been around for many decades. They can provide a more affordable form of ownership in multi-family buildings. Homeowners purchase

shares in the building rather than purchasing a given unit fee simple. While cities like New York have very high-end co-ops, other smaller cities have co-ops for moderate income households.

Moving Forward

Moving Forward – Turning Aspiration into Action

The team acknowledges that the recommendations presented within this report are ambitious; if they were easily achievable, Petaluma would have undoubtedly already accomplished them. Community leaders explicitly charged the DAT to produce an aspirational vision, and the team attempted to rise to that challenge. The time the team spent in Petaluma revealed the city to be an innovative, ambitious place, filled with motivated and savvy community members. The initiative and grassroots leadership shown by the group of volunteers who sought out and brought the DAT to town are indicative of the overall community commitment towards positive change present within Petaluma. The onus for the implementation of the community's vision cannot and should not fall simply on the shoulders of the city government; the community must be involved every step of the way. The power of an intensely motivated group of engaged citizens should never be underestimated, and by harnessing that energy the team sincerely believes that Petaluma can go well beyond the recommendations present within this report, becoming an inspiration and case study for other communities with similar ambitions.

Next Steps

Prioritize Implementation Efforts

Petaluma has a number of neighborhoods that already function as 15-minute areas or that are lacking only a few elements to fully meet the criteria. Likewise, ongoing efforts to decarbonize the city and improve transit and connectivity are resulting in positive change. To continue building and expanding the momentum of these efforts, the community needs to prioritize projects. The people who best know which projects should be given precedence in order to achieve Petaluma's larger goals are already in the community: City leaders, community residents, business folks, and staff, among others. Petaluma is entirely capable of enhancing ongoing and generating new endeavors.

To help decision makers make more informed decisions about where and what to do next, it may be useful to offer some criteria that can be used to make these decisions.

Criteria to Consider in Choosing Projects

The following are factors that should be considered for various types of projects that can help advance Petaluma's objectives.

- Engage committed partners for selected larger scale endeavors (private, non-profit, institutional, other public entities.)
- Engage community members (residents/businesses) early in the process, particularly in larger scale projects. Allow the community to help prioritize endeavors.
- Identify the greatest needs where you can make a beneficial impact.
- Are the economics of the project viable with existing public/private resources or will it require new ones? If the latter, how readily can these be secured?
- How much risk are you willing/able to take – particularly on larger projects?
- Each significant project needs dedicated staff. Larger projects may also mandate interdepartmental and/or agency commitments
- Find initial projects that can be done relatively affordably and expeditiously, and that have visible positive impact.
- Find public improvements that will help leverage additional private investment (e.g., street trees leveraging building façade improvements).

Getting Started: Tactical Projects and Programming

Everything Petaluma does should reinforce the community's identity, values and aspirations for the future. There are many examples of simple people-friendly interventions that Petaluma can engage in to promote the realization of its vision and to continue building the engagement of its citizenry. Some of them require virtually no resources, while others require volunteers, materials, and modest financial commitments. The following examples are illustrative, but Petaluma should decide what it might take inspiration from and create its own unique path that fits the community identity.

Many small-scale interventions can use existing industrial/waste materials and volunteers to build opportunities for public gathering and a stronger, people-friendly public realm. For instance, "chair bombing" has become a popular phenomenon in many communities. Chair bombing involves using donated wood pallets to build chairs and then program a public area as a people-friendly gathering space, especially in neighborhoods that do not already have any such easily accessible amenities. These kinds of creative ideas are easily scalable. In Christchurch, New Zealand, volunteers came together to build the "Pallet Pavilion" as a public gathering and event space following an earthquake event that left many properties vacant and in need of activation. In Houston's Fifth Ward, local artists gathered lumber from housing demolitions and built the "Fifth Ward Community Jam", a small amphitheater which quickly became the main civic space in the neighborhood and is programmed for community events throughout the year. These interventions do not require a tremendous amount of physical space and can be easily scaled to fit into any underutilized corner of a neighborhood. Each neighborhood could design and implement its own distinctive installation, thereby further enforcing their own unique identity within the larger community. It's also an accessible and fun opportunity in which to engage residents of a neighborhood who are perhaps otherwise less inclined to participate in public processes.

In Tampa, locals organized street festivals to reclaim the public realm for people and test new ideas regarding street design. Through the Better Block initiative, communities all over the world have engaged in community-driven pop-up street design interventions to reclaim public space and create a more human-friendly neighborhood context. These temporary interventions can serve as proving grounds to test for future more permanent improvements to the public realm. In Philadelphia, officials remade their industrial waterfront with seasonal pop-up parks, filling the spaces with gathering areas, music, food and games. The Spruce Street Harbor Park serves the community in the summer, with hammocks and industrial containers used as vendors. The WinterFest program takes over in the colder months. Both programs have been so successful that they have transitioned from pop-up parks to perennial seasonal offerings that enliven the area and produce economic benefit.

Neighborhood residents should try out ideas, let their collective imaginations run wild, and channel their inspiration. The beauty of small scale temporary interventions is that if experiments don't work out or are deemed impractical, it's easy to move on to a new idea. Community leaders should beware the reflexive "no" no that might greet ideas; the communities that use innovation and pursue out-of-the box ideas or seemingly audacious goals are often the pioneers who develop the solutions of the future.

Case Studies in Community-Led Development

Port Angeles, Washington

Port Angeles, Washington provides an example of how to inspire pride in change by creating a truly public revitalization process. Their success has been built around involving everyone in the process. In 2009, Port Angeles hosted an AIA team to focus on downtown revitalization and waterfront development. Port Angeles had suffered declining fortunes as the result of mill closures and reduced productivity from natural resource industries. It also lies at the gateway to America for people entering from Canada, and at the gateway to the Olympic peninsula and its national parks. Historically, it was home to dozens of indigenous peoples as well.

The approach that Port Angeles took to implementation opened up broad participation from the entire community. "Just two weeks after the SDAT presented more than 30 recommendations, the Port Angeles Forward committee held a public vote and unanimously agreed to recommend 10 of those items for immediate action," said Nathan West, the City Manager. "Public investment and commitment inspired private investment, and, less than a month later, the community joined together in an effort to revamp the entire downtown, starting with a physical face-lift. Community members donated paint and equipment, and residents picked up their paintbrushes to start the transformation." An immediate idea came directly from the community. Volunteers banded together to give 43 buildings downtown an immediate face-lift, and the momentum was born.

This effort led to a formal façade improvement program that extended the initiative exponentially. The city dedicated $118,000 in community development block grants for the effort, which catalyzed over $265,000 in private investment. The city also moved forward with substantial public investment in its waterfront, which had a dramatic impact in inspiring new partnerships and private investment. Within 5 years, Port Angeles had over $100 million in new investment downtown, including an award-winning waterfront that draws people back to the downtown. In June 2012, Port Angeles was recognized with a state design award for its waterfront master plan. The city completed construction of phase 1 in 2014, and launched phase 2 in 2015. Today, major new public facilities are found on the waterfront, including an arts center and a cultural center dedicated to the indigenous peoples of the area and their history.

Helper, Utah

Helper City, Utah was incorporated in the late 19th century as a result of surrounding mines and the railroad, which runs through town. It developed a thriving local mining economy in the early 20th century. The town got its name from the 'helper' engines that were stationed at the mouth of the canyon to assist trains in reaching the Soldier Summit up the mountain. The natural resource economy began to suffer economic decline over the past 20 years, and in 2015 the Carbon Power Plant in Helper was closed. It had been in operation since 1954. The economic impact resulted in de-population and increased poverty, putting a strain on resources and capacity. The population of the town is 2,095, and the per capita income for the city was $15,762, with almost 13 percent of the population living below the poverty line. In September 2017, Helper City hosted an AIA Design Assessment Team to build a community-driven strategy for its downtown. Over 200 people participated in the process, which produced a 53-page report with recommended implementation strategies that focused on strengthening the public realm, activating the downtown and enhancing the historic fabric. At the conclusion of the process, one citizen stood up and declared, "You've given us hope."

In the first year of implementation efforts, the town of 2,000 mobilized hundreds of volunteers in a grassroots effort to remake the public realm and activate downtown. Citizens were involved directly in a series of hands-on projects that included the redesign of Main Street, pop-up retail stores, redesigned public parks, restoration of the riverfront, and other initiatives. They also enhanced programming downtown with successful arts festivals and related events. The impact has been transformational, stimulating private investment and momentum for positive change. Helper City Mayor Lenise Peterman notes that '"The plan created from the SDAT event is driving continuous improvement in Helper City. By giving voice to the community, we have also given it hope in creating a sustainable environment which is respectful of our past, values our environmental assets and maximizes the opportunity for community engagement."

Recently, Carbon County leaders hired a consultant to do an assessment of the entire jurisdiction. Regarding Helper, he had this to say: "I have never seen a community like this. You guys are the poster child for how to get things done...We really believe Helper is setting the Gold Standard for Utah." That sentiment is felt locally as well. The Mayor and Steering Committee wrote that "The three-day immersion by the DAT team has impacted, and continues to impact, our community on a daily basis. People in our community have something they haven't had for some time, hope for a sustainable community. Key tenants of creating that sustainability include replenishing human capital (drawing young families to our city), caring for our environmental assets, and finally recreating an energy-based economy to a destination based one. And we are doing just that – everywhere in Carbon County people say it's happening in Helper" – and it is!" Helper is living up to its namesake and living its motto, "The Little Town that Can." As one local report noted, "Within the last 18 months, all but one of the available buildings on Main Street has been purchased and has undergone some degree of renovation."

In 2018, Helper was recognized with a Facilitation Impact Award for its revitalization efforts. As Mayor Lenise Peterman wrote, "The SDAT program was the catalyst for what we have done and is the road map for what we will do to create our best version of a sustainable community. The community, at the final presentation during the SDAT visit, literally cheered. And we are delivering on the vision in lockstep with our citizens. A community with hope is unstoppable – I can't imagine being where we are today without the support, guidance and expertise the SDAT program afforded a small, struggling rural community in Utah."

Team Roster

Team Roster

Michael R. Davis, FAIA, LEED AP- Team Leader

Michael R. Davis, FAIA, LEED AP, Principal and President at Bergmeyer Associates, Inc., is a practicing architect and an advocate for sustainable public policy. He was 2013 President of the Boston Society of Architects and 2015-2016 Chair of the Board of Trustees of the BSA Foundation. For the American Institute of Architects, Mike currently serves as Advocacy ambassador for the National AIA Committee on the Environment and as a newly appointed member of the AIA Board Government Advocacy Committee. He participated on a national AIA Materials Knowledge and Transparency working group and was a contributing author for an April 2016 AIA sustainability white paper, "Materials Transparency and Risk for Architects". Mike has participated on or led AIA Sustainable Design Assessment Team (SDAT) and Sustainable Design for Resilience Team (DART) charrettes in Ithaca, NY, DeKalb County, GA, Augusta, GA, Tremonton, UT, St. Helens, OR, Louisville, KY, and Bath, ME, as well as the AIA's first International R/UDAT charrette in Dublin, Ireland. Mike's recent professional projects include a modular student residence hall at Endicott College, a LEED Certified facility for Hosteling International Boston in an adaptively-reused historic building, and a deep-energy retrofit of public housing units for the Boston Housing Authority at the Cathedral Family Development, which achieved LEED Platinum certification. He blogs about his firm's work as signatory to the AIA 2030 Commitment at http://mikedavisfaia.wordpress.com. Mr. Davis advised the Boston Planning and Development Agency as a Member and Chair of the Boston Civic Design Commission from 1996 to 2018and served on Boston Mayor Thomas Menino's Green Building Task Force and Massachusetts Governor Deval Patrick's Net Zero Energy Building Task Force. He holds a Bachelor's Degree in Architecture from the Pennsylvania State University and a Master of Architecture from Yale University

Dr. Luis Aguirre-Torres

Dr. Luis Aguirre-Torres is the Director of Sustainability for the City of Ithaca, N.Y., where he leads the city's decarbonization and climate justice strategies. He is also co-chair of the New York State Climate Impacts Assessment, Society and Economy. Prior to joining the City of Ithaca, he was the President and CEO of GreenMomentum, a think tank organization focused on climate change and renewable energy in Latin America. He is the former chairman of the Latin American and Caribbean Council on Renewable Energy and former energy chair of the Mexico-US Entrepreneurship and Innovation Council. He holds a first degree in computer engineering from Mexico's National University, a master's in computer science and a Ph.D. in electronic and electrical engineering from University College London.

Aida Curtis

Aida Curtis is a practicing Landscape Architect, Arborist, and certified Landscape Inspector. She has led Curtis + Rogers Design Studio in Miami for three decades. Long focused on innovation and sustainability, her firm works primarily on urban public projects. Aida's over 35 years of experience includes award-winning transportation, recreational, institutional, and civic projects. Leading the go-to Hispanic/Woman-owned landscape architecture firm in South Florida has allowed her to create sustainable spaces that are economically and socially inclusive. Aida's commitment to environmental stewardship, sustainable development and resilient landscapes has benefitted hundreds of successful municipal, department of transportation and civic projects.

Abe Farkas

Abe Farkas is a highly sought-after national leader in managing catalytic, sustainable, and equitable development projects. He has three decades of experience shepherding large, complex projects from an idea to reality utilizing public-private partnerships. His past projects include the adaptive reuse of vacant Washington High School in Portland OR into creative office, music venue, community theater and rooftop bar; a 33-acre development on Portland's South Waterfront that includes a major university research hospital expansion, mixed-use, housing and neighborhood open spaces served by a streetcar, aerial tram, and light rail; and a 118-acre redevelopment on Southshore in Austin TX, which is under construction. Abe's experience on both the public and private side of development projects gives him the ability to maximize the community benefit components of projects and achieve financially feasible outcomes. Evidence of his successful past work is visible across the country in the form of vibrant, catalytic, mixed-use projects in communities large and small. Previously, Abe served as Director of Development Services for ECONorthwest, Development Director for the Portland Development Commission, Planning and Development Director for Eugene, Economic Development Manager for Seattle, and Community Development and Planning Director for Fort Wayne. Abe has a Ph.D. in American Studies from University of Minnesota and a M.A. in American Studies from Purdue University. He has served on the board of the International Economic Development Council (IEDC) and on several advisory boards for the Urban Land Institute (ULI).

Trung Vo

Trung Vo is a planner and engineer who focuses on building multimodal transportation systems to advance equity, public health, quality of life, and mobility. He works across the spectrum of project development to ensure that streets are planned, designed, and maintained to be safe, comfortable, and inviting for people of all ages, abilities, and backgrounds. He serves as the Director for Toole Design's Denver office, partnering with communities in Colorado and across North America.

Mariam Yaqub

Mariam Yaqub is an Architectural Designer at Bergmeyer, a multi-disciplinary design collaborative with offices in Boston and Los Angeles. She came to






Bergmeyer's Boston office with work experience in Rochester and Binghamton, NY, Providence, RI and Islamabad, Pakistan. During her time in Rochester, Mariam volunteered at Community Design Center Rochester (CDCR), where she is currently a board member. She continues to promote the creation of vibrant, equitable and resilient communities by engaging, educating, and empowering stakeholders in crafting purposeful design. She believes the built environment plays an essential role in shaping communities through placemaking, walkability and inclusivity. She completed her B.Sc. Arch and M.Arch degrees from Roger Williams University in Bristol, RI during which she was a recipient of two architecture scholarships AIA Rhode Island and Raj Saksena. Her Graduate Thesis "Open-Source Architecture: Redefining Residential Architecture in Islamabad" won the RWU Thesis Award.

AIA Staff:

Paola Capo

Paola Capo is the Sustainability and Communities by Design Specialist at the AIA and staffs the Disaster Assistance program. In her position, she provides architects and communities with the resources they need to create healthier, more sustainable and equitable built environments. She graduated from Georgetown University in 2017 with a degree in Science, Technology, and International Affairs, concentrating on Energy and the Environment—a degree inspired by the many places she lived growing up as an Army brat. She recently completed the 6-week [IN]City program at UC Berkeley to expand on her knowledge in urban planning.

Erin Simmons

Erin Simmons is the Senior Director of Design Assistance at the Center for Communities by Design at the AIA in Washington, DC. The Center is a provider of pro bono technical assistance and participatory planning for community revitalization. Through its design assistance programs, the AIA has worked in over 250 communities and has been the recipient of numerous awards including "Organization of the Year" by the International Association for Public Participation (IAP2) and the "Outstanding Program Award" from the Community Development Society. Erin is a leading practitioner of the design assistance process, providing expertise, facilitation, and support for the Center's Design Assistance Team programs. In this capacity, she works with AIA components, members, partner organizations and community leaders to provide technical design assistance to communities across the world. Her portfolio includes work in over 100 communities across the United States and internationally. Erin is an Academician of the Academy of Urbanism in London, UK. Prior to joining the AIA, Erin worked as historic preservationist and architectural historian for an environmental and engineering firm, where she practiced preservation planning, created historic district design guidelines and zoning ordinances, and conducted historic resource surveys. She holds a Bachelor of Arts degree in History from Florida State University and a Master's degree in Historic Preservation from the University of Georgia.

On Feb 22, 2024, at 11:07 AM, Mary Dooley <mary@madarc.com> wrote:

Dear GPAC and All:

I have several publications that talk about the various approaches and pros and cons of 15 minute city and complete neighborhoods. These are fairly quick reads. When we consider these approaches for Petaluma, we are able to adapt to fit. We can make our own name for the solution if that's best. You will notice there are some backlashes and conspiracy theories in the news as well. The misunderstanding is that limits are being forced on residents or that the results will raise rents. The plan is not to take our cars away. But maybe we don't need two or three cars. Maybe we will walk more often and drive less. Even if we commute, wouldn't it be fine for all to live within 15 minutes of parks and nature, social connections, access to public transportation and services? This isn't an either or proposition. It's a yes, and - to achieve all the goals of our five pillars.

Christina and Heather, Please include this in the public record so public can get informed on the concepts as early as possible.

Thank you for your attention.

Mary Dooley

Portland Planning put together a simple presentation on complete neighborhoods so I threw it in as the quick read.
https://www.portlandoregon.gov/cbo/article/486451
https://www.abc.net.au/news/2023-02-27/the-15-minute-city-conspiracy/102015446
https://www.politico.eu/article/what-the-city-of-the-future-borrows-from-the-past/
https://medium.com/@ryanmartyn15/the-complete-walkable-neighborhood-244aaaa90cb6

https://globalnews.ca/news/9483836/15-minute-city-edmonton-canada/

https://www.strongtowns.org/journal/2018/2/6/complete-neighborhoods

Mary Dooley AIA, Principal
MAD architecture inc.

707-765-9222

https://madarc.com/
@mad.architecture

<MAD logo small.jpg>

Complete Neighborhoods — building a healthy connected city

Bureau of Planning and Sustainability
Innovation. Collaboration. Practical Solutions.

3:00 – 5:00 p.m.
Complete Neighborhoods

- Opening remarks by Mayor Hales and Susan Anderson
- Priorities to Performance discussion — Andrew Scott
- Planning: District liaisons, state-mandated projects, RICAP — Susan Anderson
- ONI: key priority packages — Amalia Alarcon Morris
- PBOT: Last Thursday, Street Implementation Fund, Infill Dev. — Leah Treat
- Parks: SUN (including Spec Appropriation) and aging services — Mike Abbaté
- BDS: Housing inspections & distressed properties — Paul Scarlett

Complete Neighborhoods

…places that support the health and well-being of Portlanders of all ages and abilities.

Why?

- **Support for healthier lifestyles and convenience**
- **Stronger markets for Neighborhood businesses**
- **Efficient and equitable public investment**
- **Energy efficiency and emissions reduction**
- **Affordability - Lower household costs**

What makes a city healthy?

Basic Public Services

Parks & Nature

Healthy Food

Businesses & Amenities

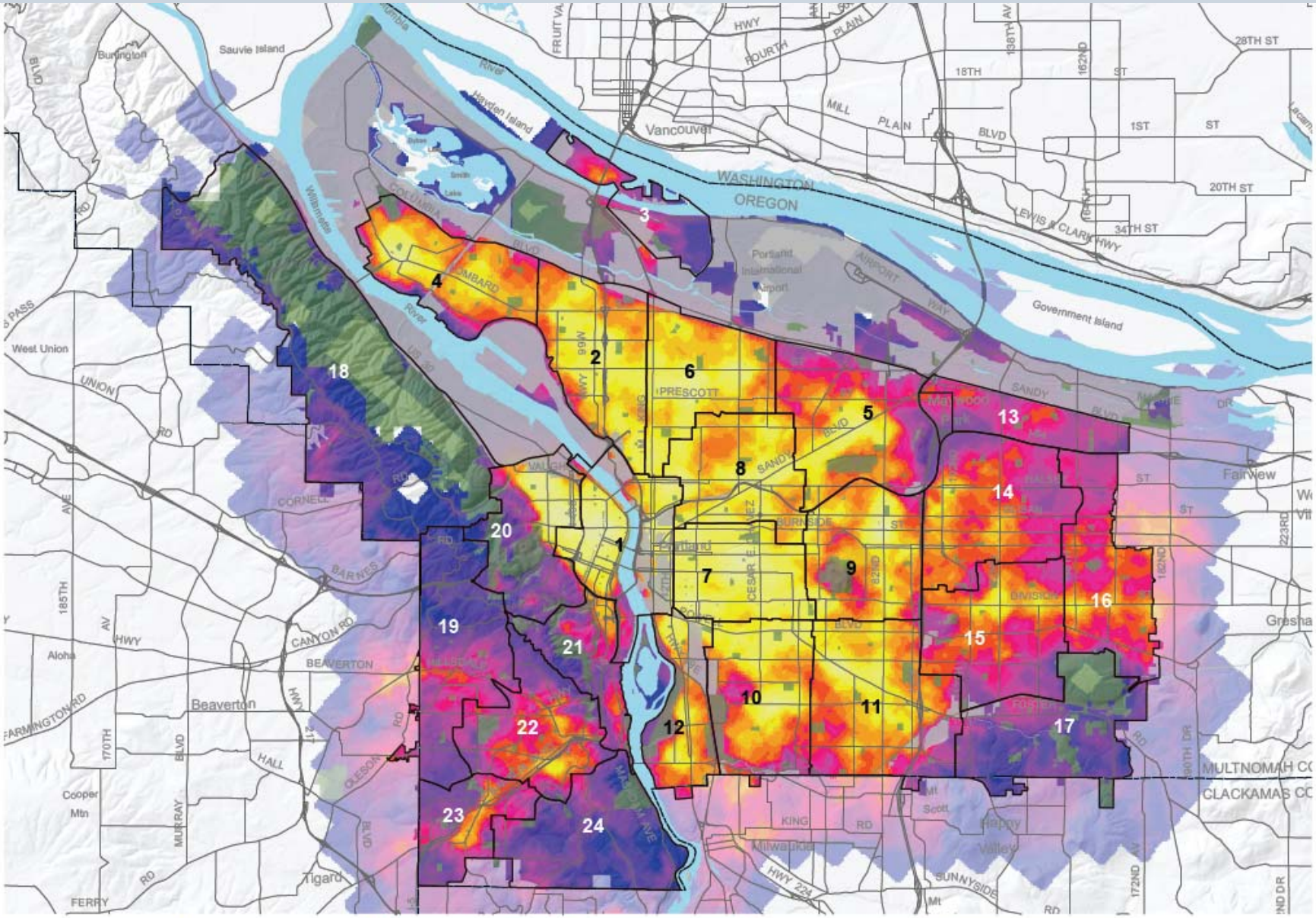
Watershed Health

Social Connections

Active Transportation

Safety

Quality Housing



Bureau of Planning and Sustainability
Innovation. Collaboration. Practical Solutions.

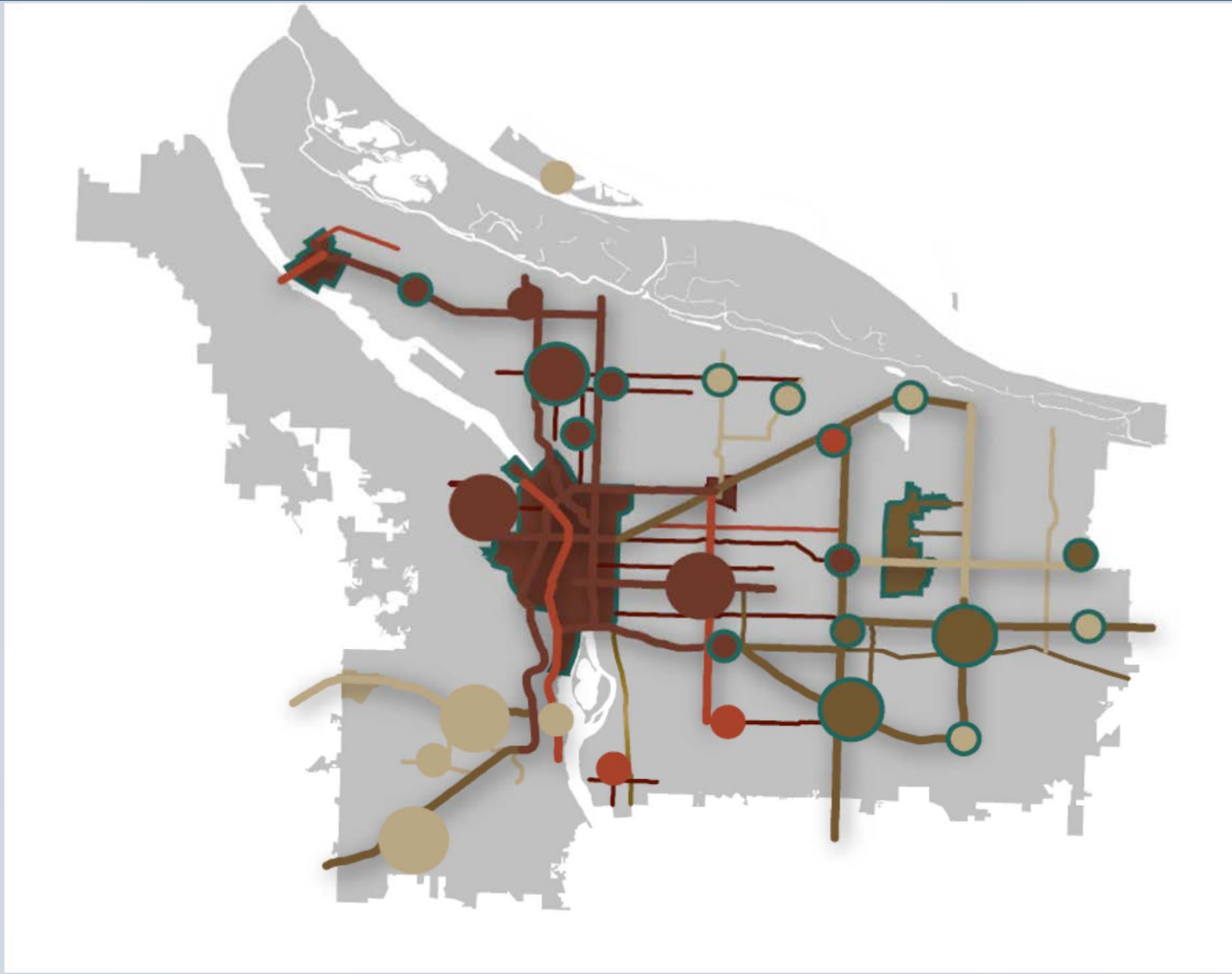
Complete Neighborhoods

Have 5 of 7 factors to be considered complete:

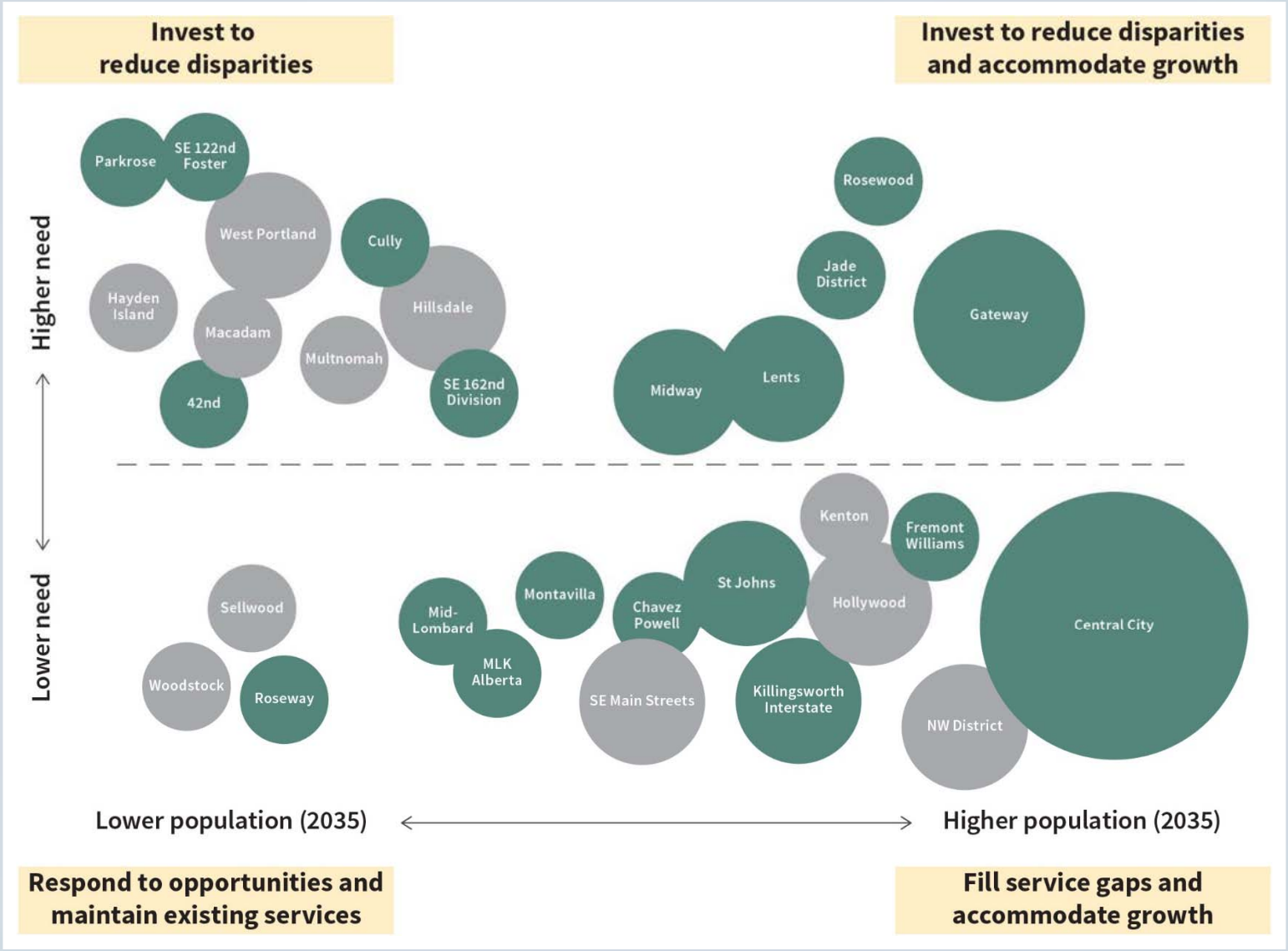
Pedestrian	Streets with sidewalks on at least one side
Bicycle	1/4 mile to a Trail or Greenway
Transit	1/2 mile to MAX or 1/4 mile to Frequent Service or 1/8 mile to Regular Service
Parks	1/2 mile to a Neighborhood Park and 3 miles to Community Center
Healthy Food	1/2 mile to Store
Commercial Services	1/2 mile to business/service cluster
Elementary School	1 mile to a public elementary school

- Today, only about half of all Portlanders live in complete neighborhoods
- Increasingly it is lower income households and Portlanders of color who are not able to live in complete neighborhoods.
- Growth over the next 25 years can be used to give more Portlanders access to more complete neighborhoods
- Portland Plan Goal: By 2035, 80% of Portlanders live in a healthy complete neighborhood with safe and convenient access to the goods and services needed in daily life.

Create healthy connected neighborhoods by growing in centers and corridors



Investment Strategies for Complete Centers



ABC NEWS

What is the '15-minute city' conspiracy theory?

ABC RN / By Nick Baker and Alan Weedon for Blueprint For Living

Posted Sun 26 Feb 2023 at 10:00am

The '15-minute city' concept has been an unlikely source of anger. *(Getty Images: Martin Pope)*

There are two very different views of the "15-minute city" idea.

To some, it's an urban planning concept that promotes sustainable and healthy living.

To a small group of others, it's a plot by "tyrannical bureaucrats" to take our cars and control our lives, which could lead to a real-life Hunger Games scenario.

After outlandish claims about lizard people, 5G and COVID-19 vaccines, conspiracy theorists are now targeting the world of urban planning, with protests against the 15-minute city concept springing up around the globe.

"I've been doing [urban planning] for a long time, but I've never seen something like this," urbanist and Vancouver's former chief planner Brent Toderian tells ABC RN's Blueprint For Living.

Toderian, who has lobbied for the idea internationally including in Australia, sums up: "It's a bit surreal."

What is it?

The 15-minute city is an urban planning concept where neighbourhoods provide residents with the basic things they need — shops, schools, parks, leisure options, health care — within a 15-minute radius by foot or bike.

"We used to have 15-minute cities as the norm. They were called good neighbourhoods — where you didn't have to get into a car for everything," Toderian says.

From mid-last century, cities have largely been planned around cars, at the expense of walking and biking, which has often resulted in car dependency and urban sprawl.

The 15-minute city is presented as one possible remedy for this.

ıffic congestion has become a big problem in many cities around the world. *(ABC News: Andrew O'Connor)*

"There are so many public interest reasons to want to do this. It's kind of a no-brainer," Toderian says.

"Your carbon footprint is a lot lower, so it's a powerful climate change mitigation tool ... It promotes urban health and thus promotes the actual reduction of public health costs ... It promotes individual affordability and household affordability because you don't need to own the second car or maybe even the third car."

Many cities have taken up the idea — or a variation of the idea — in recent years.

"Melbourne was one of the world's originators of the idea of applying time to our neighbourhoods – the amount of time it takes for us to get to the thing that we need or want every day," Toderian points out, something the city continues to embrace.

The idea has been called many things, like "complete communities", "mixed-use communities", "the city of short distances", the slightly different "20-minute neighbourhood" or as Toderian, as chief planner of Vancouver, used to call it "the power of nearness".

But the 15-minute city really came to global prominence when Paris mayor Anne Hidalgo made it a big part of her 2020 re-election campaign. For her, pedestrian and cycle-centred design was the future. She was re-elected.

"Cities around the world — mayors, politicians — started talking about this very old, normal concept of why do we have to drive to everything? Why can't we have more choices and more freedom to choose rather than just having only one choice: The car," Toderian says.

er recent years, many cities and towns have been investing in bike paths and improved pedestrian cess. *(Reuters: Gonzalo Fuentes)*

So cities started to draw up plans and implement different versions of the 15-minute city concept, with increased bike lanes, pedestrianising areas, cutting down on where cars can go.

As NSW minister Rob Stokes put it last year: "The pandemic has seen demand for walking and cycling infrastructure soar, and outdoor spaces valued more than ever. Our vision for 15-minute neighbourhoods will also improve health and wellbeing outcomes, and ensure local communities thrive."

But then the pushback started.

From 'small lies' to 'big lies'

Much of the pushback against the 15-minute city concept is rooted in fiction rather than fact.

The claims start with the idea that limiting car use is government overreach and an attack on individual freedom (even though, as Toderian says "ironically, it's providing more choice").

And from there, it gets, well, weird.

Limiting cars and promoting pedestrian or bike access is framed as a slippery slope to government-run, open-air prisons.

One British TikToker says authorities are planning to "divide up towns, cities etc ... and you're going to have to apply for a f**king permit to leave your zone".

Spoiler: Not true.

According to a tweet from controversial Canadian psychologist Jordan Peterson: "The idea that neighbourhoods should be walkable is lovely. The idea that idiot tyrannical bureaucrats can decide by fiat where you're 'allowed' to drive is perhaps the worst imaginable perversion of that idea — and, make no mistake, it's part of a well-documented plan."

What "plan"? The 15-minute city concept has also been promoted by the World Economic Forum, leading to claims that it's part of a global scheme around centralisation and control.

Anger at the 15-minute city concept has spilled from the internet to protests in several cities. *(Getty Images: Martin Pope)*

"The lies range from small lies — like 'they're going to not want you to drive [at all]' — to big lies — literally using terms like 'they want to turn your neighbourhood into a concentration camp' that 'your life is going to be like the Hunger Games, where there's different sectors that you'll be representing'," Toderian says.

It's even made it into UK parliament, with one MP calling the idea an "international socialist concept" that "will cost us our personal freedom".

Death threats and protests

These sentiments have led to real-life protests.

For example, Edmonton in Canada recently embraced 15-minute city plans, which, according to the city, "moves us closer to our vision for a more connected, prosperous, healthy and climate-resilient city".

The plan has triggered protests, with organisers incorrectly claiming "you will spend 90 per cent of your life in this 15-minute area as they are monitoring your 'carbon footprint'".

The UK city of Oxford is trying to curb car use ON some roads, enforced by traffic cameras and fines. This triggered protests against so-called "climate lockdowns" and councillors there have received death threats.

ecent protest in Oxford, England against new measures to curb traffic. *(Getty Images: Martin Pope)*

One Oxford protest, which attracted thousands of people, featured a speech by a 12-year-old girl who warned against the "dangers" of the plan.

"[They are] soon to become digital ID facial recognition zones ... How dare you steal my childhood and my future, and the future of our children, by enslaving us in your crazy digital surveillance prison."

Planning our towns and cities

Toderian is one of many in the urban planning world who have been fighting back in recent months.

The more he talks about the ongoing reactions to the 15-minute city concept, the more exasperated he gets.

"They know that the more outrageous the lie, the more attention they get ... A

More stories from Blueprint For Living:

- Kate went from Formula 1 to flaky pastry

lie gets a lot more attention than the rational truth," he says.

- How supermarket design influences what you put in your trolley
- The history of the mall

The biggest casualty may be rational community discussion around the future of towns and cities.

"I'm not an anti-car guy. I'm an anti-car-dependency guy. We can't keep planning cities and regions where the car is the only choice, because that may seem like freedom to some but it's kind of the opposite. Dependency is never freedom," Toderian says.

"There's always going to be debate in city planning. Always. But there's good faith debate, based on disagreements, and then there's deliberate lies and misinformation.

"If we're going to have real debate, discussion and democracy, and good decision making, truth is a necessity — it's a necessary starting point to make good decisions."

THE PROMISE OF THE 15-MINUTE CITY

Politicians and urban planners are betting on hyper-local living — a future ideal that borrows much from the past. But is it a path to urban utopia or just a fad?

Illustration by Simon Marchner for POLITICO

SHARE

MARCH 31, 2022 4:02 AM CET
BY AITOR HERNÁNDEZ-MORALES

This article is part of POLITICO's Global Policy Lab: Living Cities, *a collaborative journalism project exploring the future of cities. Sign up here.*

ROME

THE CITY OF THE FUTURE might look a lot like the one your grandparents — or even your great-grandparents — lived in.

As policymakers grapple with how to adapt urban centers to the post-pandemic economy and reduce emissions in the face of climate change, one solution is catching people's imagination: the 15-minute city.

As a concept, it's both quaint and quietly revolutionary: redesign cities so that people live, work and have access to all the services they need — whether that's shops, schools, theaters or medical care — within a 15-minute walk or bike ride.

Paris Mayor Anne Hidalgo was among the first to seize on the idea in 2020, putting it at the heart of a successful reelection campaign that also involved pushing cars out of the city in favor of green spaces and bike lanes.

Her pitch to turn the French capital into a "city of proximity" where children walk to school and residents know their local baker struck a chord at a time when COVID-19 lockdowns meant people were suddenly spending a lot more time in their own

neighborhoods. Enthusiasm for the idea sparked similar campaigns in Dublin, Barcelona, Milan and Lisbon.

The aim is to "rebalance" cities that were originally designed to boost productivity rather than well-being, according to Carlos Moreno, the French-Colombian academic behind the 15-minute city concept.

Some 1.3 million Parisians commute across the city from East — where many working-class neighborhoods are located — to West and back again each day. Moreno brands this a "mad way of life" that means commuters hardly spend any time in the areas where they live. Many don't know their neighbors, visit their local shops or neighborhood parks.

The pandemic has been "an awakening" in that respect, said Moreno. "People have recovered a desire to live more calmly, more socially, and with greater control over their time."

While many see in the 15-minute city a roadmap to a "new utopia," others question its novelty — and its feasibility.

Moreno admits the idea involves reversing "70 years of urban planning," a massive undertaking that throws up a host of new challenges, not least making sure cities don't become a collection of "island" neighborhoods isolated from one another.

Public housing on Via Marmorata in the 1920s and today | Gabinetto Fotografico Nazionale (archive) and Stephanie Gengotti for POLITICO

An old ideal

The urban way of life Moreno wants cities to recover never died out in Testaccio, a district of Rome tucked between a bend in the Tiber River and a mountain of broken terracotta amphorae left over from a time when the area housed an ancient port.

On a recent weekday in the district's main *piazza*, sociologist Irene Ranaldi pointed out that everything locals might need is within walking distance.

From the busy central square, dotted with butcher shops, bars and banks, it's just a short stroll to the local medical center, the primary and middle schools, a fresh food market and several local libraries.

"You don't need a car if you live here," said Ranaldi. "People walk and interact in places like this square, where all Testaccio's social classes mix over the course of the day, walking their dogs, watching their kids play, coming down for a chat with a neighbor."

If Testaccio seems to embody the ideals of the 15-minute city concept, it's also "a perfect example of a late 19th-century city," Francesca Romana Stabile, an urban historian at Roma Tre University, points out.

A public housing bloc — and entrance to the slaughterhouse — in Testaccio in the 1920s (top left) and a largely unchanged view today | Archivio Urbano Testaccio (archive) and Stephanie Gengotti for POLITICO

"Back then cities were planned with residential areas located as close as possible to workplaces and services concentrated throughout," she said.

Quality of life in Testaccio, which was organized around the slaughterhouse complex built in 1888, wasn't always worthy of emulation. The first *Testaccini* — as the locals are called — lived in squalid conditions, but public indignation soon forced local authorities to invest in developing the area, including by redirecting through-traffic along its perimeter and building public housing.

“It was all very progressive,” said Stabile, describing “grand” public housing blocs with leafy interior courtyards and plenty of light. The buildings also housed health care services and child care centers, and artists used nooks on the ground floor as studios.

For decades, Testaccio remained unchanged. Its robust housing and services, and its proximity to the slaughterhouse and other industrial sites meant locals — mainly tradesmen and blue-collar workers — continued to spend more time in their own neighborhood instead of stuck in commuter traffic in their Fiat *seicentos*.

0:00 / 0:25

The luxury of proximity

More recently, Testaccio's reputation for easy living has, paradoxically, forced out the true locals, who now find themselves priced out of the neighborhood by an influx of wealthier Romans.

Gentrification came for Testaccio in the early 2000s, when its public housing blocs were privatized and its prime location and general "charm" left it exposed to rampant speculation, said Danila Marcaccini, member of the local community group Comitato Testaccio.

"People who bought their 60-square-meter public housing flat from the city for €40,000 can now easily resell it for €400,000," she said. "These are humble, working-class people so I don't judge them for giving in and making some money, but it's still sad to see the true *Testaccini* leaving."

That shift embodies one of the main criticisms of the 15-minute city — that, today, it can only work for people who have the luxury of working from home.

“The flat under mine used to be owned by an elderly woman who worked at the market; when she passed away an architect moved in,” said Ranaldi, adding that a journalist had bought the flat next door. “People with these professions are the ones who aren’t under pressure to show up to workplaces and can take their time to go to the café, shop here, really *live* the neighborhood the way people used to.”

The distances most working-class people are required to travel for work pose a major challenge to the 15-minute city, Moreno conceded.

His vision of the ideal city involves enshrining the “right to work near home,” something he admitted can’t be done “by waving a magic wand.”

“There are aspects of this for which we do not have a solution because its a matter that’s up to private enterprise to change,” he said, adding that it wasn’t up to him to lead a social revolution or “hang the black — or red, or whatever colored — flag from the rooftop.”

But while people may still have to commute, city planners can still ensure workers “can go home to places where they can live locally and well,” he argued.

Pedestrians outside Piazza Santa Maria Liberatrice in Testaccio | Stephanie Gengotti for POLITICO

‘Simpler and closer’

That’s something that’s very much on the mind of Andrea Catarci, the city councilor in charge of finding ways to implement the ideals of the 15-minute city across Rome.

His focus, he said, is on the Italian capital’s massive commuting class, rather than the lucky few who live in neighborhoods like Testaccio.

The push comes after Roberto Gualtieri took up the cause in his successful bid to be elected mayor of Rome last year, championing the concept as a way to make the notoriously chaotic capital “simpler and closer” for its 4.3 million residents.

Catarci cautioned that it would take time to figure out how to bring the best of hyper-local life to the sprawling city.

“I have no money — this portfolio doesn’t have any budget assigned,” said Catarci. “But I do have an enormous desire to come up with ways to reinterpret and reprogram the city, and to encourage the rest of the councilors to carry out specific actions in their areas.”

The solutions that have worked in Testaccio and other parts of Rome won’t necessarily work elsewhere, Catarci said. That’s particularly true in the areas he’s most interested in targeting — the poorer, haphazardly constructed neighborhoods that have sprung up near the 68-kilometer highway circling the city.

“These are places that were built for cars, where there are no basic services — sometimes there isn’t even a local bar or tobacco shop — and residents have no choice but to drive to the nearest shopping mall to pick up basic goods,” he said.

Making the 15-minute city real for those residents will mean investing in municipal services and attracting new businesses, according to Catarci, but it also has to involve building transit options that connect those areas to the rest of the city.

The idea, he said, is not to isolate residents in their own communities.

Moreno echoed the importance of keeping neighborhoods mobile — a key point that differentiates the modern 15-minute city from what existed a century ago.

"In the past people stuck to their neighborhood and saw the people living in the next one over as strangers, maybe even as threats," he said. "We want to recover the good things from the past without going back to that. People come to cities for freedom and choice, not to end up locked in urban villages."

The Complete, Walkable Neighborhood

Wasted Space · Follow
17 min read · Sep 6, 2023

The complete neighborhood goes by many names like the 20 minute neighborhood or the 15 minute city, and it aligns with multiple other planning concepts like smart growth and new urbanism. The complete neighborhood is a city planning concept used to measure the level of access or walkability of an area. The idea originated in Portland with the 20 minute neighborhood in 2010 (Capasso Da Silva et al., 2019; McNeil, 2011; Steuteville, 2021). The concept was introduced by the planning firm, Gerding Elden. The firm states that the goal is to create a walkable environment that allows residents to reach necessary destinations by foot in 20 minutes or less. The firm adds that 20 minutes by biking or public transit is also reasonable (McNeil, 2011). Many of the complete neighborhood plans call for access to specific uses such as grocery stores, convenience stores, retail, restaurants, schools, and parks (Capasso Da Silva et al., 2019; Center for Disease Control and Prevention, 2017; City of Kirkland, n.d.; City of Portland, n.d.; McNeil, 2011; Peters, 2020; Steuteville, 2021). The complete neighborhood can be defined as a neighborhood “that allows residents to

access most activities required for a good living within [__] minutes of walking, biking or taking transit from their home" (Capasso Da Silva et al., 2019). This means having active transportation connections between home, work and play (Dovey & Pafka, 2020) that are practical and dignified. Complete neighborhoods intend to reduce urban sprawl and dependency on automobiles by encouraging walking, biking, or taking public transit (Capasso Da Silva et al., 2019; CBC News, 2019; City of Kirkland, n.d.; Peters, 2020; Steuteville, 2021).

Institutions such as the Center for Disease Control and Prevention (2017) recommend making changes to the built environment that support active modes of transportation to improve public health. Countries where active transportation is the primary mode of getting around the city have the lowest rates of obesity (Ferrer et al., 2015). Encouraging walking and rolling by providing the appropriate infrastructure can also address other prevalent conditions such as cardio vascular disease (Lo, 2009). Feelings and perception of safety can also be improved by creating active, walkable places (Speck, 2012). Reorganizing the space of streets in a way that reduces vehicle speeds will also help to improve safety for those on the street who are not in vehicles. There are significant economic benefits for residents and businesses near active transportation infrastructure. In Denver, walkable neighborhoods are valued at 150% of what sprawling neighborhoods are. New York, invested $10 million in bike infrastructure and saw a $130 million return in social benefit (Speck, 2012). Closer proximity results in higher economic production and businesses can benefit from an increased ability to innovate, create and share knowledge (Dovey & Pafka, 2020).

Walkability

According to Dovey and Pafka (2019), "walkability is a nebulous term that is best understood as an aspect of urban intensity that is open to

interpretation." Lindelow (2014) defines walkability as "any planning related factor that affects people's propensity to walk." Dovey claims that the term walkability emerged in the 1960's in response to the urban revolution initiated by Jane Jacobs. Although Jacobs never used the term "walkability," her key principles of vital urban life align with the concept (Dovey & Pafka, 2020; Peters, 2020; Speck, 2012). Those researching walkability (Center for Disease Control and Prevention, 2017; Dovey & Pafka, 2020; Ferrer et al., 2015; Gunn et al., 2017; Lindelöw et al., 2014) generally focus on three main planning areas to create walkable conditions: density, land use and access. These variables are used by companies like Walkscore and ratemystreet to measure walkability (Dovey & Pafka, 2020). Dovey and Pafka refer to these variables as the Urban DMA (density, mix, access) and argue that these three variables work in synergy, "all are necessary, and none are sufficient alone." Density is a key property of walkability. It allows, or disallows, the concentration of people and places within walkable distances. It is an "interrelated assemblage of buildings, populations and street life" (Dovey & Pafka, 2020). Land use mix influences the distances between residential, commercial, industrial uses and green space. Dovey and Pafka describe land use mix as a "live, work, visit triangle," a concept that views these three variables "not as standalone functions, but in relation to each other." Access enables or constrains pedestrian activity, and without a sufficient pedestrian network the other two variables will not work. Lindelow (2014) created a hierarchy of walking needs that begins with feasibility at the top, followed by accessibility, safety, comfort and pleasurably.

Walkable cities are also sustainable cities. Local governments across the world are adopting climate action plans to combat and reverse climate change. These plans generally call for the reduction of green house gas emissions, addressing urban heat and creating infrastructure to adapt to an increasingly extreme climate. In the United States, transportation is the

largest emitter of green house gasses (EPA, 2023). Providing people with more efficient and carbon free transportation options, like walking, biking and electrified public transit, are needed for cities to reach their emissions goals.

Communities can be developed through the creation of pedestrian spaces. Creating active and vital spaces provides more opportunities for neighborhoods to connect and communities to form. The City of Kirkland, Washington claims that "pedestrian activity and local gathering places build social cohesion." Active, walkable places are capable of connecting neighborhoods and improving quality of life. Research has found that residents living on light traffic streets have three times as many friends as those who live on busy streets (Speck, 2012).

Most importantly, walkable cities are equitable cities. Those who rely on active modes of transportation most are low income people of color. Cities that have more transit options have less income inequality (Speck, 2012). Governments must ensure equitable access to active modes of transportation throughout the city.

Critique and Expansion of the Complete Neighborhood

The complete neighborhood is an interesting concept with opportunity to build upon. In this section I will critique elements of the complete neighborhood that I find to be too timid to fully accomplish the stated goals of the concept. The multiple active modes of transportation specified in the concept make the measurement of access or completeness ambiguous. The current version of the complete neighborhood specifies broad categories of essential services and amenities that residents must have convenient access to. I will attempt to unpack the more specific services and amenities that are included within these broad categories. Finally, I will challenge the concept

of the complete neighborhood to not just provide convenient active transportation access, but also guarantee the use the essentials described.

Convenient Access

The complete neighborhood is currently defined by the amount of time it would take an able bodied person to walk, bike or take transit to their destination. It may take a disabled person or someone who uses a mobility device longer to travel that same distance. For the remainder of this paper the terms walkable, or pedestrian are intended to describe people of all abilities including those using mobility devices. The distances covered between walking, biking and transit varies greatly. For an able-bodied person, 20 minutes of walking might be about one mile, 20 minutes of biking might be two miles, while 20 minutes on transit could be four or more miles, yet all of these modes are grouped together in the same measurement of access. How can we label a neighborhood as complete when the residents are leaving it to access their essentials? Because of the significant variation of distances between modes, critics claim that the complete neighborhood is not a planning standard as much as "an open to interpretation goal" (Steuteville, 2021). To these points, the complete neighborhood claims that if a person can access their essentials within a 15 or 20 minute trip in one direction of active transportation, then their neighborhood is complete (CBC News, 2019; City of Kirkland, n.d.; City of Portland, n.d.; McNeil, 2011; Peters, 2020; Steuteville, 2021). As a pedestrian and active transportation user myself, I do not consider a 15 or 20 minute one way trip as convenient or walkable. Measuring these as round trips, the neighborhood then becomes a 30 or 40 minute neighborhood. This proximity between home and essential destinations will not encourage walking, especially for those who drive, considering the round trip in a car may take only ten minutes. A convenient walk can be subjective and varies depending on factors like age, ability, weather, and the type of destination but is often considered to be a

five to ten minute walk (Ferrer et al., 2015). For older residents or those with mobility challenges a convenient walk may be closer to three to five minutes. The complete neighborhood must aim for a convenient round trip via walking. This means that essentials should be within a 5 to 10 minute roundtrip walk from home. Measures of convenience should also consider experience driven factors like safety, comfort, and accessibility (McNeil, 2011). This relates to the quality and availability of pedestrian infrastructure like sidewalks, marked crosswalks and bulb out intersections. Additionally, roads must have calm drivers and protect pedestrians on sidewalks with physical barriers like parked cars, bollards, or planters. Even confident bike riders prefer to routes with less exposure to drivers (Broach et al., 2012). In order to effectively reduce vehicle miles traveled and get people out of their cars, walking must take less time and be more convenient and enjoyable than driving. Only then will people choose not to drive.

Services & Amenities

The current version of the complete neighborhood specifies some broad categories of amenities and services as necessary or essential. These categories include grocery stores, places of employment, schools, parks and green space, civic and community centers, healthcare and transit options (Capasso Da Silva et al., 2019; Center for Disease Control and Prevention, 2017; City of Kirkland, n.d.; City of Portland, n.d.; McNeil, 2011; Peters, 2020; Steuteville, 2021). The following section will specify in further detail what access to these broad categories means in practice and in neighborhoods.

When a neighborhood has a single grocery store, health care provider or place of worship within a convenient walking distance, that does not mean that the neighborhood is complete for all residents. In places with high proportions of low income or BIPOC residents, a grocery store like whole foods will not meet the dietary or budgetary needs of all. The complete

neighborhood must then require that residents are able to walk to essentials that meet their culturally specific needs. In the previous example, for the area to be complete, that may mean having multiple grocery stores that provide culturally appropriate ingredients for the African American, Asian, Hispanic/Latinx and conventional American diets. The same is true for health care. If a neighborhood has an LGBTQIA+ community, to be complete will mean having walking access to a health care provider that specializes in working with this community or one that the community feels safe and comfortable receiving care from.

The new, further defined version of the complete neighborhood aims to provide convenient walking access to civic spaces, which can include banks, post offices, libraries, city halls and other government offices. The complete neighborhood should enable residents to participate in decision making processes, engage with elected officials, and organize around topics that are important to the community. In practice this may mean having satellite government and planning offices located within each neighborhood to allow residents to be able to conveniently walk to places of civic engagement. In Oregon and other states that do mail in ballots, this means that each neighborhood has a ballot drop off that is accessible within a convenient walking distance from home. The complete neighborhood should provide convenient walking access to resources and opportunities that empower residents to engage in civic life and shape the future of their neighborhood. This is critical for fostering a complete and inclusive neighborhood for all.

The complete neighborhood provides education opportunities within a convenient walking distance. This requires having public schools, libraries and community learning centers located within each neighborhood. Does this mean that each neighborhood needs to have an elementary, middle and high school within its boundaries? Yes, otherwise the neighborhood is

complete only for families with children of a certain age. This will also aid efforts to provide children with safe routes to school.

The complete neighborhood provides healthcare services within a convenient walking distance. This includes, hospitals, clinics, emergency rooms, dental care, eye care, and even healthcare for pets. Hospitals are unique in this discussion because many who arrive to the hospital do so via ambulance. Even in a car free future there will still be a need for emergency vehicles like fire trucks and ambulances. If emergency vehicles can arrive to a home within a five minute drive, and take someone to a hospital within a five minute drive, this will help to improve completeness and safety for residents. Other healthcare services should be provided within a convienient walk from home.

The complete neighborhood does not include policing as an essential service to have convenient access to. In the complete neighborhood, residents can decide for themselves how they would like to keep the neighborhood safe, which may mean alternative and abolitionist practices of community safety and harm reduction.

The complete neighborhood provides residents with convenient walking access to social and cultural resources. This includes community centers, places of worship, parks, and cultural venues. The complete neighborhood should provide a built environment that allows for a sense of community to form through the use of shared spaces like community gardens, public plazas and other public spaces that can be used for gathering, playing, exercising, relaxing, forming community and political organizing. Although the complete neighborhood concept aims to improve equity and access for vulnerable or marginalized populations, people may still experience various forms of poverty due to larger systems and structures that produce

inequality and discrimination. Because of this, the complete neighborhood should provide convenient walking access to services or mutual aid that cater to those experiencing poverty.

The complete neighborhood provides convenient walking access to a wide range of transportation options. This requires access to built infrastructure like sidewalks, protected bike lanes, bus or rail lines as well as the actual transit services. Streets need to be designed in a way that is comfortable for pedestrians to use. There should be space dedicated to protected bike lanes as well as for bus or rail. It is critial to provide physical barriers between those inside of cars and those outside of cars in order to provide a safe and comfortable pedestrian experience. Mass transit in the complete neighborhood must be dignified, practical, clean, and safe for users. The complete neighborhood also provides access to shared mobility options like rentable bikes, scooters, and cars.

The complete neighborhood provides convenient walking access to jobs and other economic opportunities. This includes businesses and employers of all types, which means zoning must allow for retail, hospitality, office, and non polluting manufacturing. The complete neighborhood allows residents to walk to their place of employment. This also means that the neighborhood must provide access to jobs that residents can perform. Shifts to remote work will alleviate some of the pressure on neighborhoods to provide residents with walking access to jobs.

Car infrastructure often limits accessibly for those who are not in a car or who are not able to drive, such as pedestrians, seniors, children, or the disabled. Cars also contribute to air pollution, noise pollution, traffic, and road violence. The complete neighborhood minimizes negative impacts of cars by providing multiple transportation options like walking cycling,

public transit, micro mobility, and car and ride share. The complete neighborhood minimizes the amount of street space dedicated to cars and maximizes space for pedestrians, bikes, and public transit. It also promotes and supports carpooling, ride sharing, and vehicle sharing as a way to reduce space needed for private vehicles and to reduce vehicle miles traveled. To incentivize the use of other modes of transportation the complete neighborhood charges for on street parking. A parking benefit district can be created for the neighborhood. The money generated from parking is split between the city and the neighborhood and is used for infrastructure improvements like side walks, bulbouts at intersections, protected bike lanes, etc.

Uneven development and unequal distribution of environmental benefits in cities have created social and environmental problems that need to be addressed with urgency. The complete neighborhood offers a foundation to build a framework for creating more equitable and sustainable communities that prioritize the well-being of residents over profit and economic growth. Sustainability seeks an alternative way of life, much different from our current linear, single use, exponential growth model that causes vast environmental destruction and loss of life. True sustainability prioritizes the environment and life over profit and economic growth. Equity seeks to address and repair the harm caused by settler colonialism, racial capitalism, patriarchy, and heteronormativity in a way that uplifts those who have been marginalized and excluded from economic, environmental, and social benefits because of their race, gender or sexuality. By creating neighborhoods that are more livable and sustainable, the complete neighborhood aims to prioritize social equity, environmental justice, and public health.

Sustainability

The complete neighborhood places an emphasis on sustainability. This paper argues that complete neighborhoods are designed to be resilient to the impact of climate change, including sea level rise, extreme weather, drought, and wildfire. Reducing urban heat means removing asphalt and concrete wherever possible and replacing it with healthy soil for vegetation and trees that can provide shade to cool temperatures on streets and in homes.

The complete neighborhood should include water conservation measures such as rainwater harvesting, greywater recycling and low flow fixtures in all buildings. To be resilient in the face of severe drought the complete neighborhood must use water more responsibly, not just in buildings but with our infrastructure as well. This again means removing impermeable asphalt and concrete surfaces wherever possible to allow water to be absorbed and stored in the ground. This ground water can feed the trees and other vegetation that provide shade and habitat for humans and non humans.

The complete neighborhood is built with sustainable materials that are locally sourced or recycled. The trees that are planted to reduce heat and increase shade can be sustainably harvested and used for the production of buildings and other products. This helps to minimize the environmental impact of construction and also encompasses a portion of the urban metabolism within the city's boundaries, more on this here. A complete neighborhood is designed and built to be energy efficient and net zero. It generates energy from solar or wind while also being efficient with how it uses energy. Buildings in the complete neighborhood use passive heating and cooling to reduce demand for electricity.

Equity

The complete neighborhood is one that provides all of life's daily essentials within a convenient walking distance. But the complete neighborhood is not just about providing convenient walking access, it's about providing an inclusive environment that supports the social, economic, and political rights of all residents. This means considering the culturally specific needs of residents as well as guaranteeing access to things like housing, healthcare, and nutritious food. A complete neighborhood is one that is inclusive and accessible to all residents, regardless of income, race, gender, and sexuality. A complete neighborhood provides safe spaces for those belonging to marginalized communities. This means providing inclusive and safe public places like streets, parks, transportation, and restrooms.

The housing proposed in complete neighborhoods should provide residents with a wide range of types and provisions of housing. A complete neighborhood provides non market, decommodified and guaranteed housing to those residents who cannot afford market rates. This type of housing will likely not be provided by for profit developers but rather by the city, regional, state or even federal government. Governments and agencies can provide housing for a range of incomes without needing to make a profit, enabling them to charge much lower rents or even provide housing for free. Governments can also create programs to help spur resident lead development within the neighborhood. In this scenario a group of soon to be neighbors pool their money together to purchase or develop a building that meets their individual and collective needs. This can be in the form of a community land trust, coop or potentially a combination of the two. This can be applied to commercial space too. Small, local businesses with limited capital should also have access to commercial space within the neighborhood, whether they can afford market rates or not.

In addition to the development of new housing and commercial space, this research also proposes improvements to active transportation infrastructure like bike, bus, and rail. These are all things that increase property values and the risk of displacement for vulnerable residents. The complete neighborhood is one that protects existing residents from market forces that may displace them from the area they consider to be home. If the complete neighborhood provides environmental improvements like more housing, more green space, and more amenities while within an exclusively market based political economy, those who cannot afford to be there will no doubt be excluded or displaced. When thinking about how to prevent displacement while also increasing the supply of housing and green space within cities, it becomes clear that the market based solutions of neo liberal real estate markets will not be compatible. Providing housing and green space as commodities in a free market will always price out those who cannot afford them. In order to truly prevent displacement, cities must systematically ensure that housing is guaranteed throughout each neighborhood, that poverty is eradicated, and populations are no longer vulnerable to displacement but resilient in the face of change. If the complete neighborhood aims to integrate equity into its framework, marginalized neighborhoods and communities will need to be systematically protected from being displaced from areas that receive environmental improvements. The concept of the complete neighborhood can help to bring housing, transportation and environmental justice to marginalized neighborhoods that lack environmental amenities and access to daily necessities.

Equity in the complete neighborhood also includes decolonization. Decolonization addresses the historical and ongoing effects of colonization and settler colonialism on indigenous and other marginalized peoples. It addresses and repairs the ways that these communities have been excluded from the social and economic benefits of colonization and racial capitalism.

Decolonization recognizes the ways in which colonialism has created racial and economic inequality, and how that inequality has shaped the built environment. Decolonization involves restoring power, control, and land back to indigenous people, which will have major implications for how land is viewed and used. This means the decommodification of land and other essentials, the stewardship of that land and a shift in economic and ecological paradigms. Decolonization can help to provide the resources and support that indigenous communities need to create neighborhoods that are inclusive, equitable and accessible. The redevelopment of land within cities always presents an opportunity to reindigenize the land.

This further developed version of the complete neighborhood centers walking access, measures round trips and creates a density of residential and commercial uses that allow residents to reach their destination and come back home within 10 minutes. It maximizes space for humans, minimizes space for cars and provides a range of shared transportation and mobility options. This new version of the complete neighborhood provides culturally appropriate and non market options for housing and commercial space, guaranteeing that any and all incomes and cultures have opportunities to live, work, play or learn in the neighborhood.

References

Broach, J., Dill, J., & Gliebe, J. (2012). Where do cyclists ride? A route choice model developed with revealed preference GPS data. *Transportation Research Part A: Policy and Practice*, *46*(10), 1730–1740. https://doi.org/10.1016/j.tra.2012.07.005

Capasso Da Silva, D., King, D. A., & Lemar, S. (2019). Accessibility in Practice: 20-Minute City as a Sustainability Planning Goal. *Sustainability*, *12*(1), 129. https://doi.org/10.3390/su12010129

CBC News. (2019, August 22). *Welcome to the 15-minute neighbourhood: Intensification key to city's official plan | CBC News*. https://www.cbc.ca/news/canada/ottawa/ottawa-first-glimpse-official-plan-1.5256386

Center for Disease Control and Prevention. (2017). *Connecting-Routes-Destinations-508.pdf*.

City of Kirkland. (n.d.). *10 Minute Neighborhood Analysis*. 10 Minute Neighborhood Analysis.

City of Portland. (n.d.). *20-Minute Neighborhoods.webloc*.

Dovey, K., & Pafka, E. (2020). What is walkability? The urban DMA. *Urban Studies, 57*(1), 93–108. https://doi.org/10.1177/0042098018819727

EPA. (2023, April 19). *Inventory of U.S. Greenhouse Gas Emissions and Sinks | US EPA*. EPA.Gov. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks

Ferrer, S., Ruiz, T., & Mars, L. (2015). A qualitative study on the role of the built environment for short walking trips. *Transportation Research Part F: Traffic Psychology and Behaviour, 33*, 141–160. https://doi.org/10.1016/j.trf.2015.07.014

Gunn, L. D., King, T. L., Mavoa, S., Lamb, K. E., Giles-Corti, B., & Kavanagh, A. (2017). Identifying destination distances that support walking trips in local neighborhoods. *Journal of Transport & Health, 5*, 133–141. https://doi.org/10.1016/j.jth.2016.08.009

Lindelöw, D., Svensson, Å., Sternudd, C., & Johansson, M. (2014). What limits the pedestrian? Exploring perceptions of walking in the built environment and in the context of every-day life. *Journal of Transport & Health, 1*(4), 223–231. https://doi.org/10.1016/j.jth.2014.09.002

Lo, R. H. (2009). Walkability: What is it? *Journal of Urbanism: International Research on Placemaking and Urban Sustainability, 2*(2), 145–166. https://doi.org/10.1080/17549170903092867

McNeil, N. (2011). Bikeability and the 20-min Neighborhood: How Infrastructure and Destinations Influence Bicycle Accessibility. *Transportation Research Record: Journal of the Transportation Research Board, 2247*(1), 53–63. https://doi.org/10.3141/2247-07

OPB. (2021, August 6). *Oregon medical examiner releases names of June heat wave victims — OPB*. https://www.opb.org/article/2021/08/06/oregon-june-heat-wave-deaths-names-revealed-medical-examiner/

OPB. (2022, March 17). *Oregon and the West may be stuck in perpetual drought, study says — OPB*. https://www.opb.org/article/2022/03/17/drought-oregon-climate-change-perpetual/

Peters, A. (2020, January 29). *Paris's mayor, Anne Hidalgo, wants to build a "15-minute city."* https://www.fastcompany.com/90456312/pariss-mayor-has-a-dream-for-a-15-minute-city

Speck, J. (2012). *Walkable City: How Downtown can Save America One Step at a Time* (First Edition). Farrar, Straus and Giroux.

Steuteville, R. (2021, January 25). *The 15-minute neighborhood gets its 15 minutes of fame*.

Urban Planning | Urbanism | City Planning | Urban

Written by Wasted Space

Follow

0 Followers

I write about the potential to develop parking lots and vacant land into mixed use projects to improve access to daily essentials within cities

More from Wasted Space

Wasted Space

Wasted Space

LIFESTYLE

15-minute cities: What they are, and why some people are lashing out against them

By Michelle Butterfield • Global News
Posted February 13, 2023 5:24 pm
5 min read

How your neighbourhood can affect your health
The way your neighbourhood is designed can affect your health, without you even realizing it. More walkable neighbourhoods, close to gr...

RELATED: How your neighbourhood impacts your health. – Sep 27, 2018

If you've spent more than a few minutes on social media recently, chances are you've heard debate around the concept of the **"15-minute city."**

As governments become increasingly focused on climate change and sustainability, many urban planners are looking for ways to help city dwellers become less dependent on cars. One way to do this, they say, is by keeping the essentials for daily life — entertainment, shopping, green space, work and

School in Paris, France.

In a 2020 TED Talk, Moreno outlines the idea of the 15-minute city, which boils down to giving area inhabitants access to the essential services they need "to live, learn and thrive within their immediate vicinity."

Ideally, residents should be able to walk or bike to work, groceries, health care and more, in approximately a quarter of an hour, he says.

In the video, Moreno argues that humans' sense of time has become "warped" due to urban sprawl, and we now accept long commutes of car-centric cities as normal.

In 2021, Moreno **won the Obel Award** for developing the concept.

"We need to broaden our focus to include different densities and territories: from the **small cities to the mid-sized cities** and even to the rural territories," he said at the time.

"We need to keep the concept of the 15-minute city but imagine new ways to implement its principle of proximity in other densities."

And while the concept has been picked up by a bunch of cities — **Paris adopted the concept in 2020** and a group of cities in the U.K. will begin piloting their own plans next year — it's Edmonton's recent interest that's been causing a bunch of hullabaloo in Canada.

Edmonton Mayor Amarjeet Sohi has been peddling his city's proposal to create its own "15-minute districts" by, in his words, "widening sidewalks or multi-use trails that **encourage walking**, or sustainable infrastructure in communities where they make sense," reports the Western Standard.

more zealous dissenters have imagined scenarios were citizen movement is monitored through surveillance or that people are fined for leaving their neighbourhoods.

While these ideas, which have thoroughly been debunked as conspiracy theories, have gained traction overseas, Edmonton city council is the latest subject of the backlash. Despite never saying that they plan to limit travel between neighbourhoods, and clarifying that they're **simply interested in creating more walkable neighbourhoods**, it hasn't stopped people from protesting the idea and spreading misinformation.

In December, Canadian psychologist Jordan Peterson retweeted a tweet containing false information about 15-minute cities.

"The idea that neighborhoods should be walkable is lovely. The idea that idiot tyrannical bureaucrats can decide by fiat where you're 'allowed' to drive is perhaps the worst imaginable perversion of that idea–and, make no mistake, it's part of a well-documented plan," Peterson wrote.

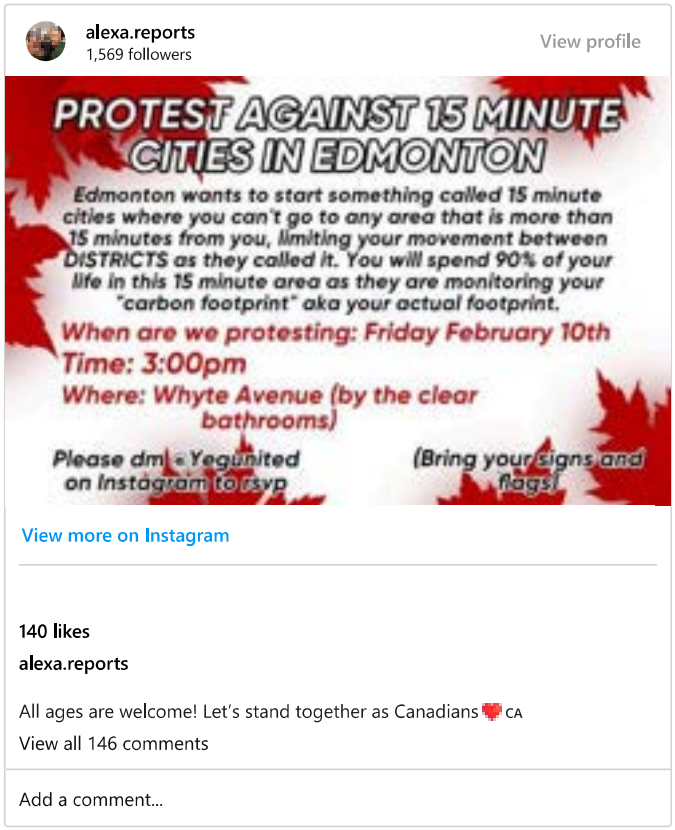
Calgary businessman and philanthropist W. Brett Wilson also drummed up a fair bit of alarm around the topic when he tweeted a map labelled as Edmonton, showing colour-coded neighbourhoods with an overlay text box saying that cars would not be permitted to drive between zones.

However, as many pointed out, the map is not of Edmonton, but rather the

Alberta intends to opt out of national pharmacare plan

16 charged, 18 arrested in major operation targeting organized crime in Quebec

The pushback in Edmonton, based mostly on false and made up information, resulted in a group of concerned university students meeting up last Friday to protest the idea of the 15-minute city.



"Our mayor, Amarjeet Sohi, would like Edmonton to become a 15-minute city, which will be **limiting our movement between districts**, as they call it. They want us to spend 90 per cent life in this 15-minute area so they can monitor our carbon footprint, also known as our actual footprint," Alexa Posa, a representative for YegUnited and organizer of the event, told the Western Standard.

A lot of the **concern around 15-minute cities**, notes Vice magazine, is the fact that the concept has been **discussed and promoted by the World Economic Forum (WEF)**, an organization already at the centre of a bunch of COVID-19 conspiracy theories.

While the WEF has peddled its "**Great Reset**" plan as a rapid post-pandemic overhaul of business models, economic systems and societies, conspiracy theorists have glommed onto the plan's title, baselessly arguing that COVID-19 was **created in a lab** and unleashed on the world by leaders who want to take over the global economy. Essentially, they argue, it's a one-way path to big-government socialism.

It appears that those sharing mistruths about what a 15-minute city could look like in Canada are taking prompts from across the pond. When Oxford City Council in the U.K. revealed last year its **intention to introduce the concept**, in an effort to cut down on traffic in the city's centre at certain times of the day, they proposed ideas that could discourage people from driving outside their designated district. Vehicle monitoring cameras designed to recognize licence plates would enforce compliance, they said, as well as having people apply for permits to travel into other neighbourhoods.

MORE ON LIFESTYLE

- Alberta intends to opt out of national pharmacare plan
- Airline warns summer schedule at risk due to Boeing. Here's why
- Can your doctor dump you as a patient for going to a walk-in clinic?

Really, though, no Canadian plans for a 15-minute city have come even close to suggesting that level of monitoring, so far.

"It is **not about restricting movement**, monitoring people or tracking an individual's carbon emissions," Edmonton's District Planning website clearly states. Rather, it "is about changing the way Edmonton plans and supports development and growth and moves us closer to our vision for a more connected, prosperous, healthy and climate-resilient city."

STRONG TOWNS

We Need Complete Neighborhoods

Andrew Price · February 7, 2018

I'm interested in creating livable, walkable, human-scale cities, and one of the most important elements to creating a livable city is the development pattern of your local neighborhood. We talk about car dependency being bad and limiting our freedom, but what does 'transportation freedom' look like? Waiting for a bus every time you leave home? Not so much. I believe that the most free mode of transportation is one that doesn't require any vehicle to get around — thus, our largest gains with building livable, human-scale cities come from building foot-oriented neighborhoods.

Any talk of reducing car dependency is often followed by a conversation about "transit-oriented development" or other ways of inducing transit usage. It's easy to induce transit usage — put all of your residential housing on top of one set of subway stations, and everything else on top of another set. Then space everything out so you can't walk between everything. Your trains will be crowded and ridership will skyrocket!

But, that isn't very livable nor is it much better than being car dependent; it leaves you dependent on trains and billions of dollars to get around, only to find out you need to send a billion more to keep up with demand. Sounds like Le Corbusier's City of Tomorrow.

The best way to easily and affordable get people around is to reduce the distance they have to travel. If you move things close enough and make it comfortable to get around, people will walk.

spent time living in a walkable city without a car, you know that your quality of life is largely dependent on the amenities within your neighborhood — the walkshed of your home.

A good neighborhood will have enough variety of restaurants to keep you satisfied, along with schools, parks, grocery stores, walk-in clinics, entertainment, etc. If you were fortunate enough to work from or close to home, it's the sort of neighborhood you could go months without leaving and not feel like you're missing out on anything.

What I'm describing here is what I like to call a Complete Neighborhood. A Complete Neighborhood is one where, outside of commuting to work or having a "night out," you can get everything you need within walking distance.

Pick a random neighborhood in Manhattan and it'll likely be a Complete Neighborhood. (I know New York is an atypical American

STRONG TOWNS

further out into the outer boroughs and suburbs you go (unfortunately, you don't have to go far) the less "complete" the neighborhood becomes, regardless of how long it takes to get into Manhattan via transit.

It's really not fun having to board a subway train with two hands full of grocery bags — it is far easier to shop at a local grocery store. We bought a Trolley Dolly from QVC that we take to the store or the farmers market. It's awkward to take on the bus, but really easy to wheel down the street.

A trolley dolley. (QVC)

A small walk-in clinic in Manhattan. There are plenty of these scattered around.

If you're sick, it's even more miserable to wait outside for the bus. It's also gross to ride the bus next to someone who's coughing and sniffing, and I am sure your Uber driver wouldn't appreciate it either. But we all get sick, so it is incredibly important to have walk-in clinics scattered around that don't take more than 10 minutes to walk to.

If you live in an apartment without a yard and the weather is nice, you want to go outside and be a few minutes from a park, not go outside and wait on a bus to take you to a park. When I have children, I think it would be more reassuring to think of them playing down the street at the park, rather than

A good neighborhood will also offer entertainment options (a bar with live music, a movie theater, a dance club, a comedy club — whatever your scene is) where you don't have to worry about a curfew imposed by the transit system shutting down or Uber surge-charging you during the wee hours of the morning.

This isn't too say you will never leave your neighborhood; you may commute a long distance to work, you may want to explore other areas of the city, spend the day out shopping, have a night out on the town, visit friends who live in other neighborhoods, etc. However, a good neighborhood has enough variety to meet enough of your needs that you're not bound by a car, bicycle, or transit on a regular basis.

Separating uses to a scale that requires a vehicle — whether it is a car, a bicycle, or transit — to get around for basic necessities is an artificial problem created by modern planning. Until we change our development pattern to build Complete Neighborhoods, any transportation infrastructure (whether widening roads to accommodate more cars or tunneling a subway line) is just wasteful spending.

Once we build foot-oriented neighborhoods, transit and cycling become productive investments. Transit just becomes "train/bus assisted walking". You can already walk around your source and your destination, and you could even walk the entire distance from A to B, but your bus/train/bike is used to speed up part of your walk. The same goes for biking.

In my next piece, I will show examples of foot-oriented places that were built without extensive transit investment that are still flourishing and succeeding today. Look for that article next Wednesday.

(*All photos by Andrew Price unless otherwise noted. Top photo from Pixabay*)

STRONG TOWNS

Related stories

Andrew Price

Andrew Price (Twitter: @AndrewAPrice) has been a regular contributor to Strong Towns since 2013 and is a founding member of the organization. Andrew is a software developer by day and an urbanist by night. He is passionate about traditional urbanism – he believes in fine-grained, highly walkable places that are built for people. He grew up in Australia and now lives in the United States with his wife. Andrew is a regular contributor on Strong Towns and runs his own blog, andrewalexanderprice.com. You can find many of his photographs throughout the Strong Towns website. Andrew's motivation to be involved in Strong Towns and urbanism is to create a great place that he and his wife, and one day their children and their future generations will want to call home.