#### AGENDA ITEM 6 - PowerPoint Presentation - Wally Siembab with SBCCOG Research Director

# Planning <u>and</u> Implementing Proximity in South Bay Sub-region

Introduction
SCAG CEHD Policy Committee
April 6, 2023

# "A SUB-URBAN LABORATORY" • Microcosm of California • Every ethnicity • Every income • Diverse languages • Hills, beaches and valleys • 15 cities from 2000 to 150,000 in population plus portions of LA County and LA City • Total about 1 million people

# Proximity – been around for a while, marketed under a variety of brands

 Traditional to early industrial cities - range limited by walk and horse power

All rely on Legacy Tools – Cycling, transit, walking + residential density

- Compact cities
- Complete neighborhoods
- 5 minute neighborhoods
- · Greenbelt Cities
- Smart Growth
- 15 minute Paris

#### 15 Minute Paris

Carlos Moreno, Sorbonne Professor, Mayor Anne Hidalgo, c2020

- The 15-minute city represents the possibility of a decentralized city," says Carlos Moreno
- it endeavors to turn the French capital into what Moreno calls a "city of proximities." His 15-minute concept was developed primarily to reduce urban carbon emissions, reimagining our towns not as divided into discrete zones for living, working, and entertainment, but as mosaics of neighborhoods in which almost all residents' needs can be met within 15 minutes of their homes on foot, by bike, or on public transit

# Reduce Carbon Emissions Time is short, Stakes are high

- · We are on a highway to climate hell
- · Earth's vital signs are now Code Red
- Civilization facing an 'uncharted territory of destruction
- Requires everything, everywhere, all at once, U.N. Secretary-General António Guterres
- Current rate of GHG emissions must be reduced by 50% within 7 years. GHG emissions budget will be exceeded by 2030 at current rate of production, -- meaning tipping points in the various carbon sinks will be exceeded and the earth will become like a runaway furnace generating heat on its own regardless of global society's policies.

# Reducing GHG Emissions from Mobility 2 Factors

- Converting fossil-fueled vehicles to electric drive
  - Current EV strategy replace long distance ICE vehicles with long distance EVs, no change to development pattern
- Ensuring the source of electricity is renewable and adequate
  - Electricity from renewable energy depends on demand that does not exceed supply with millions of EVs plus more A/C adding to demand.
  - Prudent to use small battery LUVs for short trips

#### Criteria for becoming more proximate

- Fast deploying major infrastructure construction does not qualify
- Affordable -- for government and consumers
- High probability of success (small pilots that can scale up and be replicated)
- · Large scale demonstrations with measurable outcomes
- Inconvenient truth legacy tools and residential density have failed to reduce carbon emissions produced by automobile suburbs
- Essential that we re-evaluate the legacy approaches to proximity what will they contribute to 50% reduction in the rate of GHG emissions?

### Implementing Proximity New (Old) Tools & Infrastructure

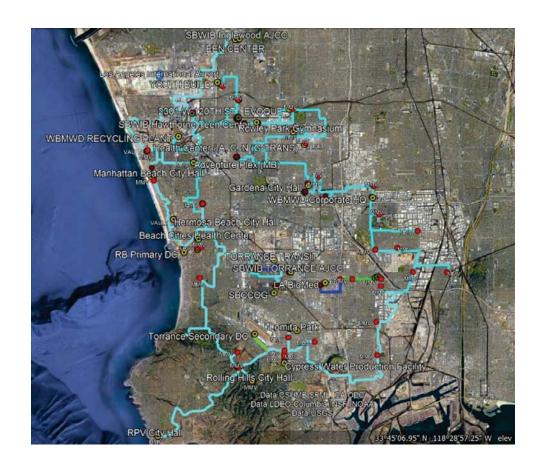
- Digital technology, which is transforming institutions, the economy, mobility
  - Transmission of place is now possible, <u>Being Digital</u>, Nicholas Negroponte, 1995, verified as COVID adaptation
  - Fiber network and shared public access portal (Digital Hub)
- Micro-Mobility revolution brings low cost, small battery, slow speed EVs to the market
  - Considerable innovation in the micro space
  - Specialized short range (neighborhood) vehicles can make proximity work (be space serving) and as well encourage more proximity (space shaping). William Garrison, Dan Sperling, UC Davis, 1991
- Renewable energy micro grid
  - Roof top solar supported by on-site, large capacity storage batteries
  - Original 1955. popular following Hurricane Sandy after 2012

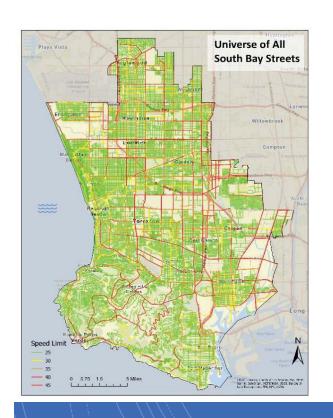
## SBCCOG: Implementing Proximity Transforming Neighborhoods

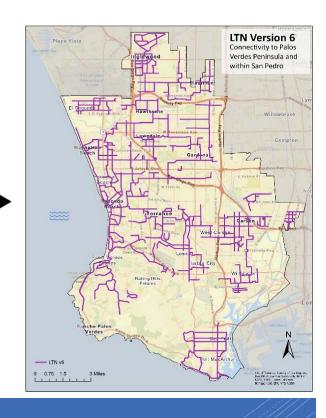
- South Bay Fiber Network middle mile broadband access
- Neighborhood "Digital Hub" public facility anchors neighborhood center
  - Maker space tools for participating in the digital economy
  - Service space for distance ed, tele-medicine, e-gov, telework
  - Micro grid solar and battery storage; reliable electricity
  - Climate relief programs and services cooling spaces, heat stroke aid
- Micro-Mobility Ecosystem
  - South Bay Local Travel Network safe routes for ALL ZE slow speed devices connecting neighborhoods to each other and destinations
  - Neighborhood mobility hubs anchored by micro-mobility and connecting to regional transit network

## SBCCOG: Implementing Proximity Neighborhood Centers

- Small footprint, high density and diverse destinations
  - Destination Density -- destinations per acre
  - Destination Variety number of NAICs codes present
  - "Retrofitting Suburbs to Increase Walking", Boarnet et al, <u>Urban Studies</u>
- Combines physical presence with virtual presence
- Neighborhood participation in proximity planning leads to community empowerment
- · Can revitalize declining commercial districts







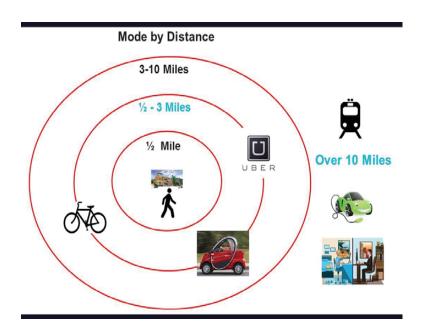
#### Rolling Turtle



**Branded Wayfinding** 



#### Drive What You Need 70% trips < 3 miles 90%, 10 miles



Vehicle Types
E-Bike
Folding Bicycles
Compact Bicycles
Cargo E-Bikes
Hydrogen Bike
E-Trike
Recumbent E-Trikes
E-Skateboard
Portable Scooters
Seated Scooters
E-Push Scooter
NEVs
Horizontal 2 Wheelers
Hands Free Horizontal 2 Wheelers
Power Shoes
Wheelchair NEV
E-Unicycle

# Micro-Mobility: Wheels your way

- **◆**Zero Emission
- **♦**Local Use
- **♦**Slow-Speed
- **♦**Small

#### Zero Emission Micro-Mobility Modes

Electric power, small, short range, lightweight, zero emission, low cost, and speed limited











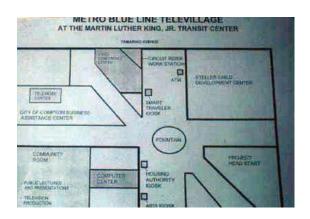
#### Digital Hub





#### Blue Line TeleVillage MLK Transit Center, Comptom, 1995













#### Challenges

With the help of cartoonist Walt Kelly and his strip Pogo Possum

#### We have met the enemy and it is us;

- Key institutions adopt goals but don't embrace the urgency of supporting the transformation necessary to meet climate goals
- Bureaucratic silos prevents holistic strategies
- Built environment to be retrofit with minimal new construction
- Time from NOFA to contract to realize grant funds; taken CARB over 2 years to rollout e-bike subsidy program,

Having lost sight of our objectives, we redoubled our efforts."

 Investment directed to legacy strategies that have not succeeded at the scale required.

# Supportive Policies

- Telework
  - · State incentives for remote work,
  - regional coordination (marketing, resources including training, work station matching)
- Mobility -- State rebates for all local use vehicles
- Broadband Funding for Universal Access to complement billions invested in Universal Service
- Housing development -- State reverses recent housing legislation and returns autonomy to local planners so that proximity can be planned

#### Questions

Learn more about Micro-Mobility -- Dan Sturges, Near to Far, Amazon