CarFree, USA: Welcoming Millions Fleeing Sea Level Rise

In a few decades, an emergency of internally displaced persons (IDP's): Where will we put them ?

What can we all afford to build and operate for them ? What can Earth afford ?

A conceptual template for quickly installing high-density urbanization:

- Completely free of personal vehicles and their infrastructure
- As an integral loop -- donut, half-torus -- the only efficient topology for transit-only urbs
- "Helicopter down" upon low-density regions of extant cities, including brownfields
- Tangential and intersecting to accommodate more IDP's, and others attracted by CarFree lifestyle
- Population determines density and diameter: 100,000 or more, 3 km or more
- Long-term thinking guides and inspires short-term planning, to escape perpetual over-automobility

Rationale:

- Rapid sea level rise will be a global emergency: will humanity survive ? Where and how ?
- Rapid response to rapid sea level rise: we must accommodate millions fleeing low-lying coasts.
- "Taking" private property for CarFree loops will be justified, and must be compensated.
- Plan and invest now: mature this conceptual CarFree template.
- Design first for Accessibility; then for Mobility. Good urban design minimizes need for mobility.
- Transportation trends are now toward shared, driverless, electric; CarFree is the ultimate
- Optimizes Transportation As A Service (TAAS)
- Design for people, not for cars
- Design for minimum Earth impact, smallest human footprint, closed-cycle services
- Goals: conservation of land, energy, materials, residents' time
- Lower Cost Of Living (COL); improve health, reduce health care cost -- walk and interact more
- Safer for young people: walk and bike everywhere

Enabling design features:

- Contra-rotating, concentric, transit loops
- Fixed-guideway system (FGS) transit: Bus Rapid Transit (BRT), Light Rail Transit (LRT), streetcar
- Full-featured, community-center transit stations about every 500 m
- A train each way, every 5 min
- Integral, autonomous loop, donut, half-torus: the only transit-efficient design
- The FGS carries people, packages, freight, mail
- Continuous paving for all service vehicles, Transportation Network Companies (Uber, Lyft, et al)
- Peripheral parking lot(s) or structure(s) sequester the few for personal LDV's, plus rental cars
- "Cars" are centrally sequestered, fueled, charged, guarded, always available
- Low public infrastructure capex, opex
- Reduce private capex, opex

All activities are within walking distance of a transit station, a community center serving two, contra-rotating, concentric, fixed-guideway transit systems carrying people, packages, mail, and freight -- the heart of each roughly symmetrical neighborhood, community -- a pearl on the necklace. No highway-capable personal vehicles (cars, SUV's, vans, pickups), of any propulsion energy, are allowed in the urbanized area.

These morphable "Villages" -- design and purpose, style and theme architecture, and layout and density -- may vary greatly. With the integral "donut" , the community can fit any situation, geography, topology, as overlaid on a real city: Density x Diameter determines Population.

See J.A. Crawford's CarFree City graphics, books, and videos at: www.carfree.com

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www.leightyfoundation.org/earth.php