

Tiny TransitTM for Cities



Cut Carbon Emissions
in Your City Before
It's Too Late

Susan Engelking

DP

tiny transitTM
let the people flowTM

Presentation to City of Austin
Urban Transportation Commission

Susan Engelking
Author and Founder
Tiny Transit Strategies
July 9, 2019

The infrastructure we build
over the next three years will
determine the fate of humanity.

— Robin Chase
Co-founder of Zipcar



Compare Carbon Emissions

**Neighborhood
Electric Vehicle**



**Conventional vehicle
emits 4.6 metric tons
of CO₂/year,
shrinking ice cover
by 147 feet/year**



CANADA

Pacific Ocean

Atlantic Ocean

MEXICO

www.freeworldmaps.net

Gulf of Mexico

Seattle

Portland

San Francisco

San Jose

Los Angeles

San Diego

Mt Whitney 4418

Colorado Plateau

Phoenix

Denver

Kansas City

Edwards Plateau

Dallas

Houston

New Orleans

Miami

Minneapolis

Milwaukee

Chicago

Detroit

Cleveland

Cincinnati

St. Louis

Memphis

Buffalo

New York

Philadelphia

Baltimore

Washington D.C.

Boston

L. Superior



L. Michigan

L. Ontario

L. Erie

St. Lawrence

Cascade Range

Columbia Plateau

Snake R.

Rocky Mountains

Great Plains

Red River

Arkansas Plateau

Ozark Plateau

Coastal Plain

Appalachian Mts.









Electric Cab North America

Austin, TX



Movemint Bike Cab
Austin, TX



1 Off road paths

- 2 Moveable barriers
- 3 Ordinary bollards
- 4 Retractable bollards
- 5 Planters
- 6 Small tunnels
- 7 Bridges
- 8 Existing bike/ped bridges, adapted
- 9 Metal guardrails
- 10 Barrier arms
- 11 Placemaking art, trees and more



Photos: Susan Engelking

1 Off road paths

2 **Moveable barriers**

3 Ordinary bollards

4 Retractable bollards

5 Planters

6 Small tunnels

7 Bridges

8 Existing bike/ped bridges, adapted

9 Metal guardrails

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1 Off road paths

2 Moveable barriers

3 **Ordinary bollards**

4 Retractable bollards

5 Planters

6 Small tunnels

7 Bridges

10 Long aerial extensions

9 Metal guardrails

10 Barrier arms

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Photos L to R: Susan Engelking

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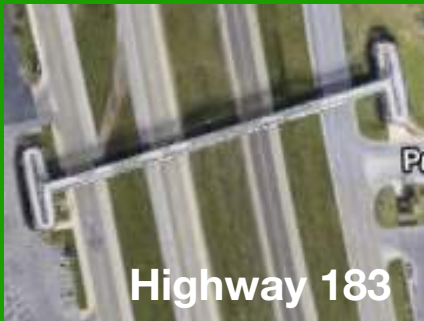


Photos L to R: Susan Engelking, Polaris GEM

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Over Hwy 183 at Springdale Rd.
Austin, TX



Highway 183



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Leverage \$16 million
bicycle bridge over Loop
360 at MoPac, Austin, TX,
to also accommodate
NEVs and other low speed
vehicles



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Over 1-45 South Houston on
way to Galveston , TX



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LEAN Action Plan / by July 10, 2020

1. Develop an NEV plan

2. Incorporate LEAN Lanes in...

All new construction and developments

\$420 million smart corridors

Convention center expansion / Downtown projects

3. Take it to the people

4. Join Innovator & Early Adopters

Compare Carbon Emissions

**Neighborhood
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**Conventional vehicle
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“My personal theory is that
culture changes when a
small group of people find a
better way to live, and the rest
of us copy them.”

— David Brooks

Develop \$1 Billion LEAN Infrastructure by 2027

Reduce Carbon Emissions by 900 Million Metric Tons

Disruptive Approach VS Traditional Bond Approach

Year	Value of Infrastructure	CO2 Cut—Metric Tons	Value of infrastructure	CO2 Cut
2020	\$100 M	23,000	0	0
2021	\$200 M	69,000	0	0
2022	\$350 M	138,000	0	0
2023	\$500 M	220,000	0	0
2024	\$700 M	335,000	0	0
2025	\$900 M	496,000	0	0
2026	\$1 Billion	682,000	0	0
2027	\$1.3 Billion	900,000	0	0

- \$1.3 Billion infrastructure
- Leverage existing assets and investments
- Contain property taxes
- Cut CO2 emissions while enhancing mobility, safety, affordability, equity, health, economic resilience

VS

- Lost opportunities
- Property tax increase to pay for bond issue that's too little, too late

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