“Right-Sizing S. Florida Avenue (SR 37) in Lakeland, FL This is a Test. Only a Test”

Julie Townsend, Executive Director, Lakeland Downtown Development Authority

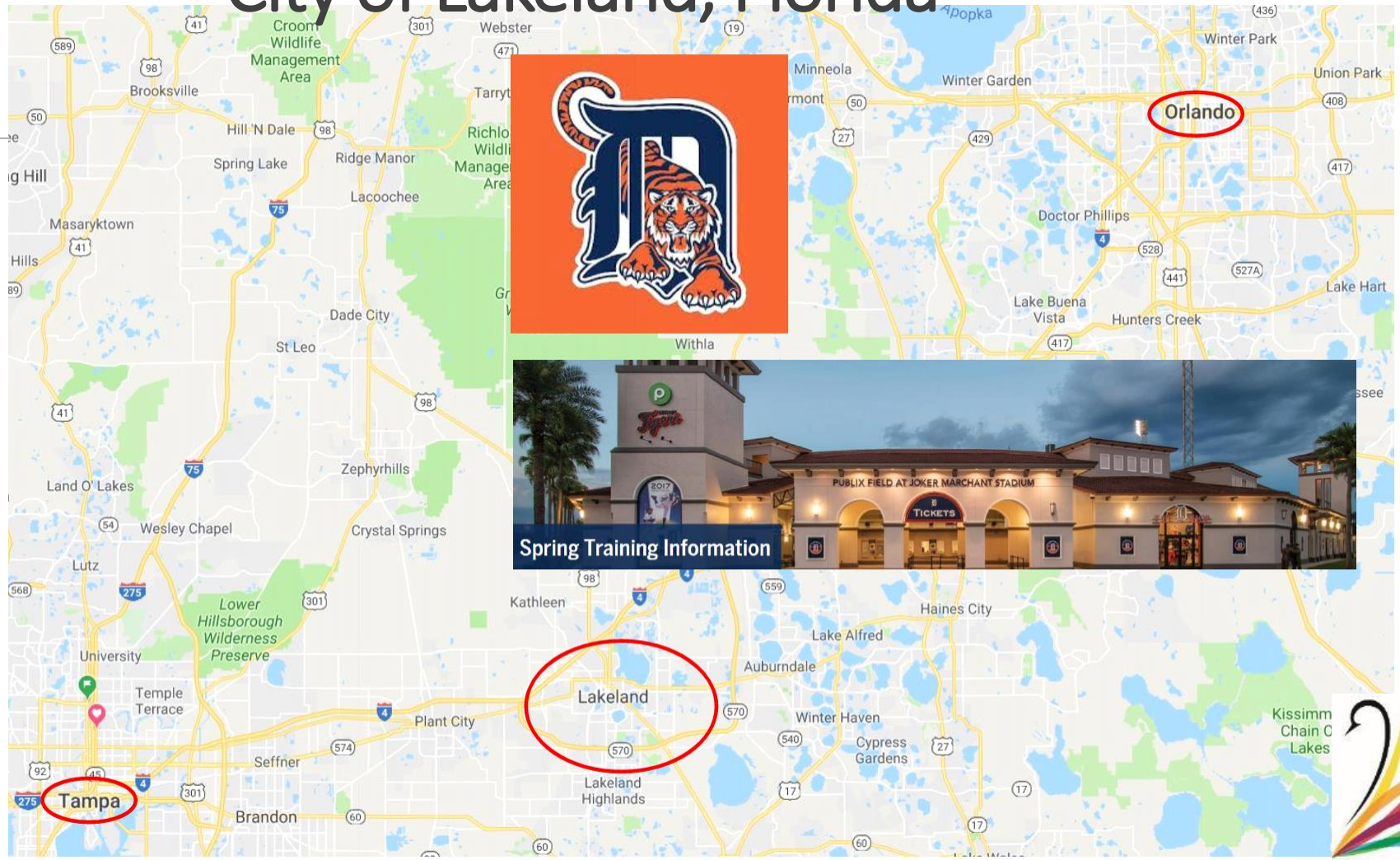
Angelo Rao, PE, Complete Streets Practice Leader, S&ME, Inc.

February 2, 2023, Diplomat Hotel, Hollywood, FL

Thanking Mr. Charles Barmby,

Business Development and Transportation Manager, City of Lakeland

City of Lakeland, Florida



CITY OF Lakeland
www.lakelandgov.net

Two Concepts:

- **Disruptive Innovation**
- **The “S” Curve**

Perhaps the World's Most Iconic Chord??
Name that Song?

Name that Song????

https://www.youtube.com/watch?v=Yjyj8qnqkYI


THE BEATLES
From New York to Daly City
16 shows in 10 cities
NORTH AMERICAN TOUR 1965
THE BEATLES
Shea Stadium 1965
55,000 screaming fans
The largest Live Band Crowd Ever!!
ATLANTA STADIUM
THE BEATLES
1:32 / 16:58 • Stadium Rock


VOX Amplifiers: From 30 Watts to 100 Watts stacked!!
(could barely hear the Beatles over the screaming)
To now over 1,000 Watts!!
2:17 / 16:58 • Sta
HD

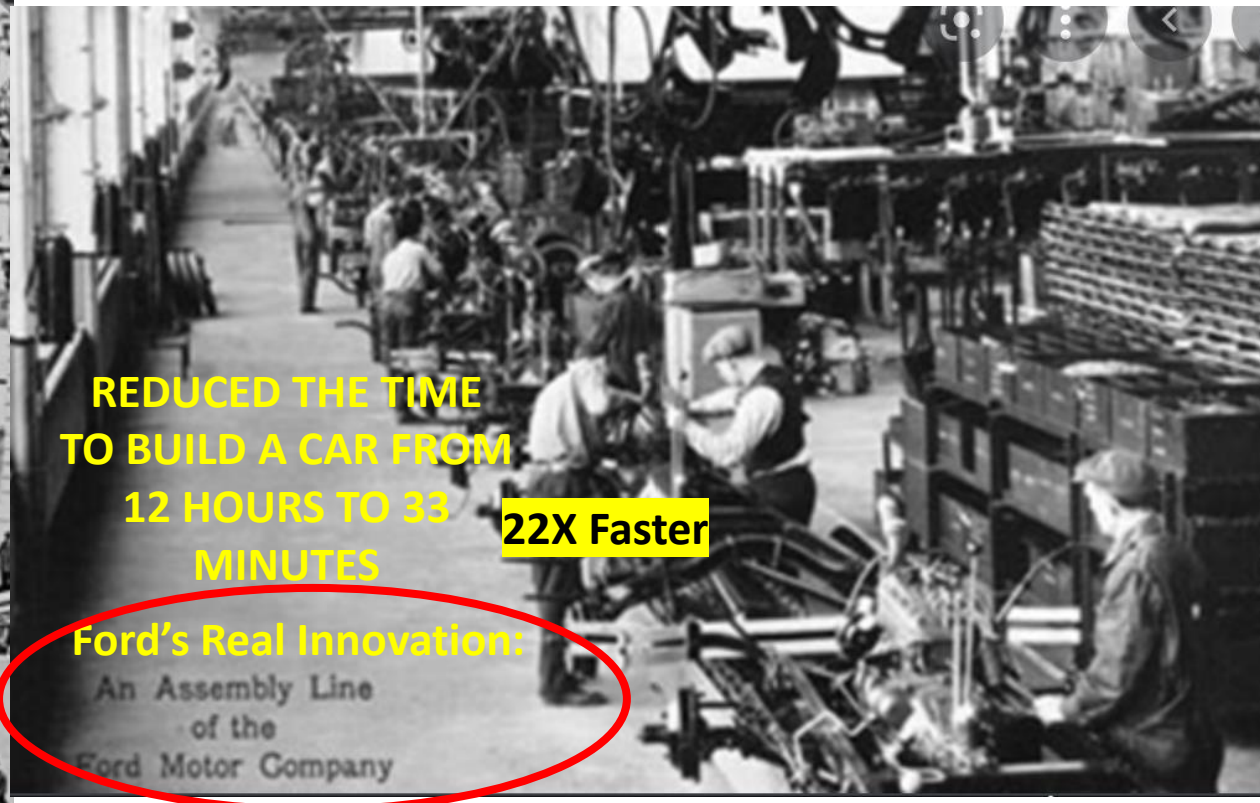
Easter Parades in New York City

Easter Parades in New York City

Tony Seba RethinkX

Easter Parades in New York City

Year 1900: One Motor Vehicle



Tony Seba RethinkX

Easter Parades in New York City

Year 1900: One Motor Vehicle

Tony Seba RethinkX

Easter Parades in New York City

Year 1900: One Motor Vehicle

Year 1913: One Horse & Carriage

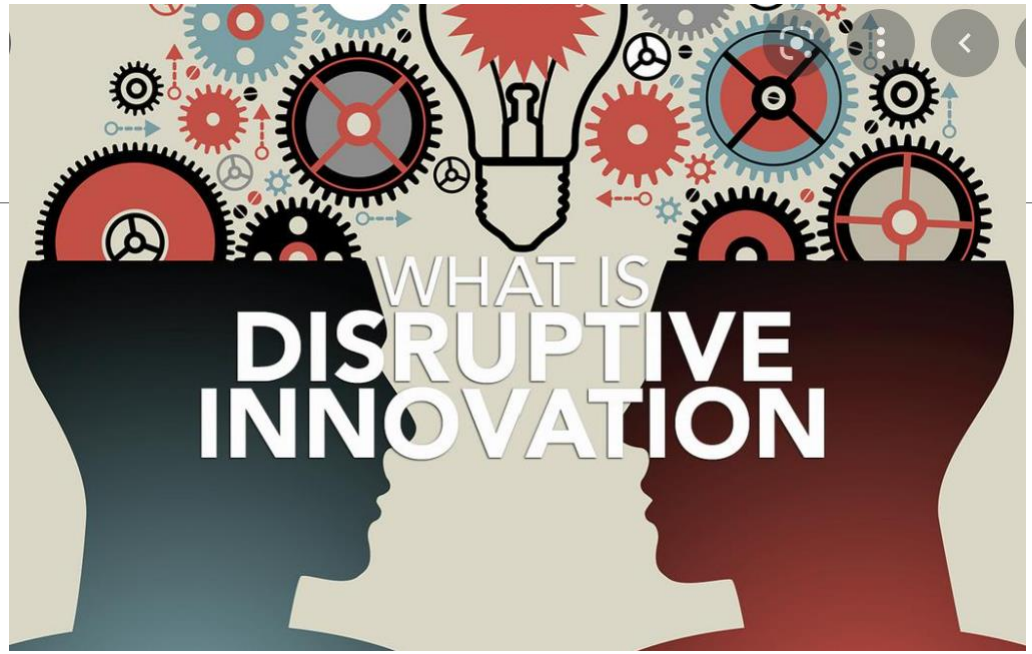
Tony Seba RethinkX

The key result of Ford's Innovation:

Safer, Affordable **and** ***Accessible***
for almost ALL Americans!

Kind of sounds like Complete Streets!

Disruptive Innovation:

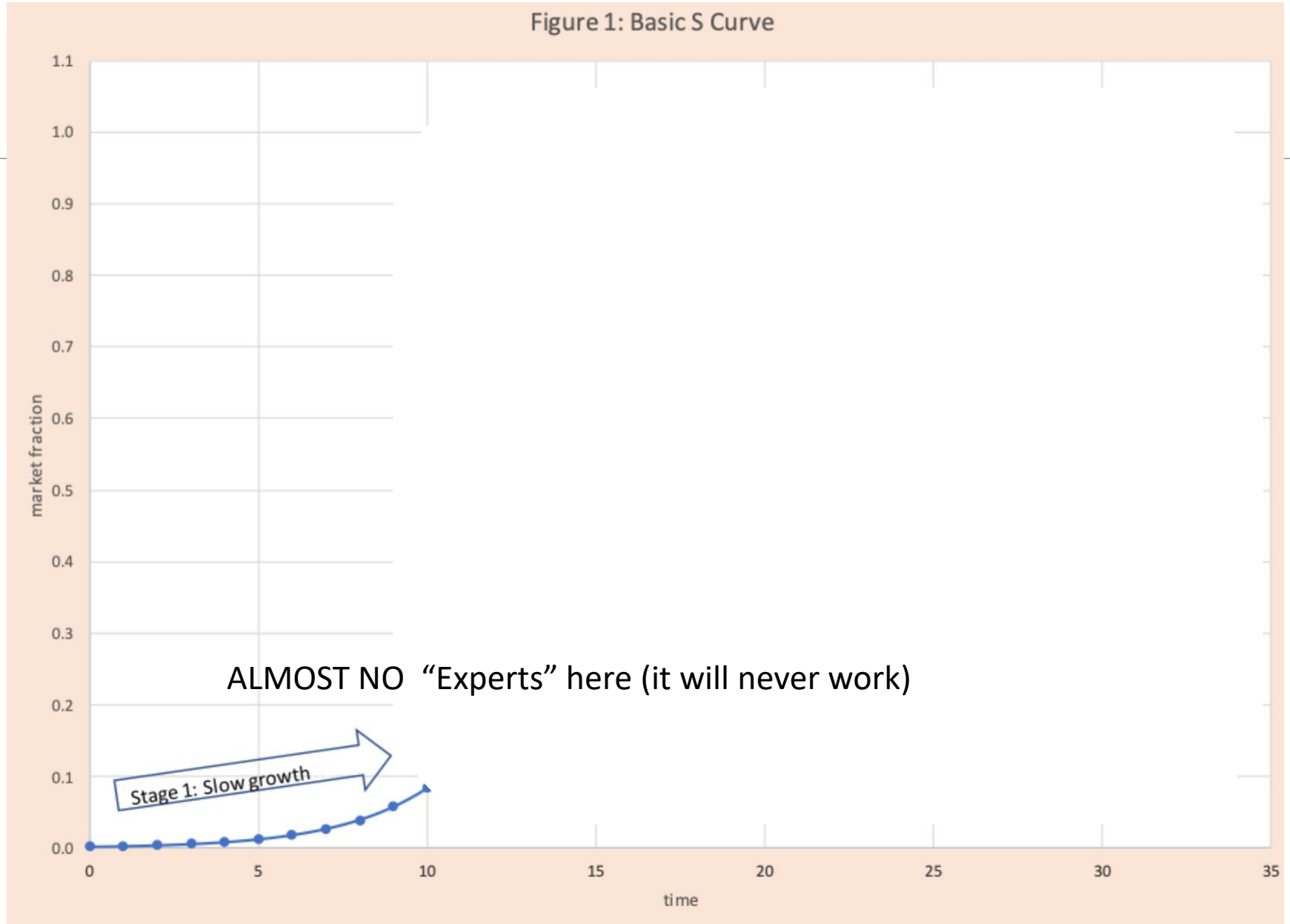


- Developed by Clayton M. Christensen in 1995
- Innovation that creates an environment of:

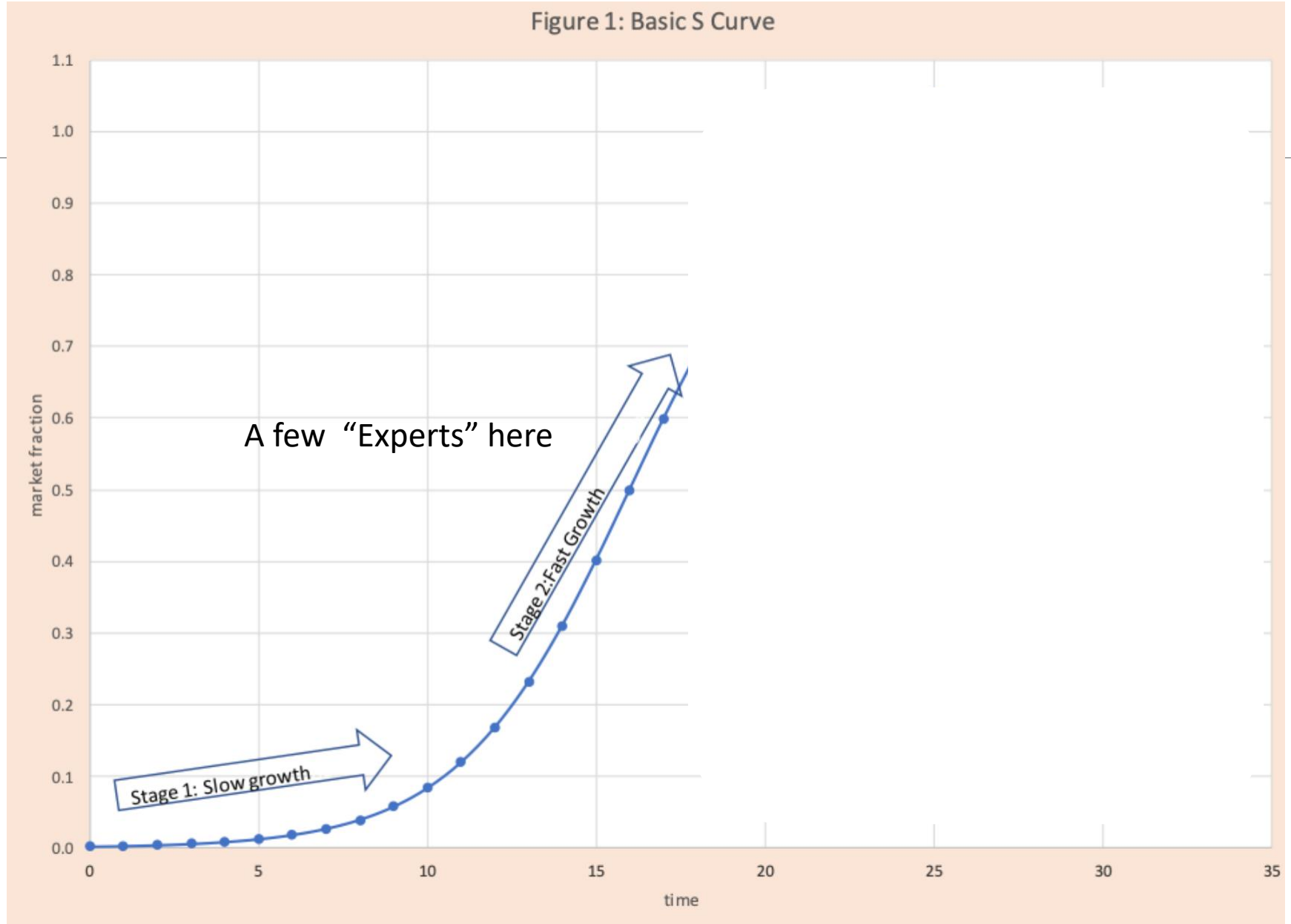
➢ Affordability AND

➢ Accessibility ***for ALL users***

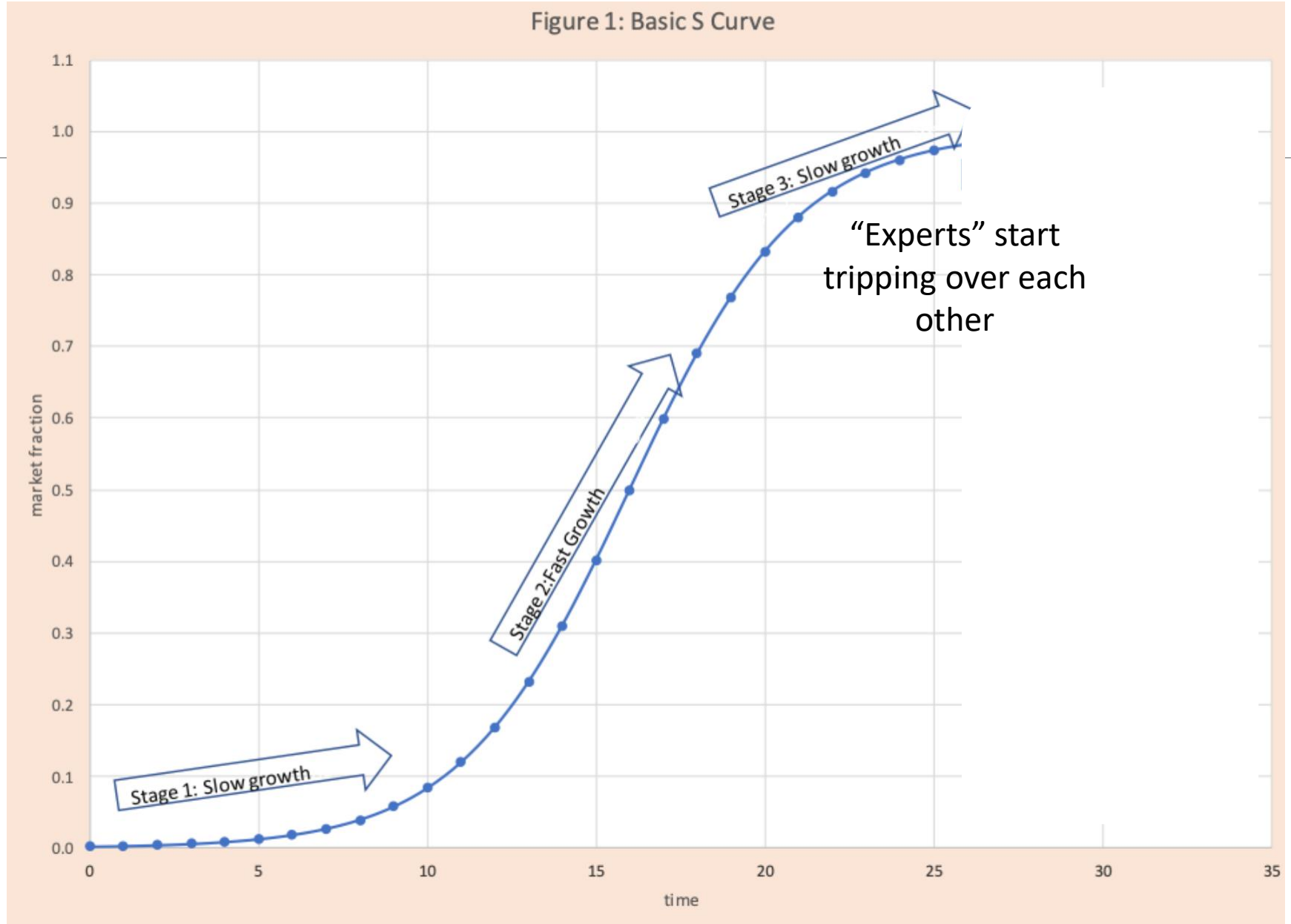
Disruption Innovation



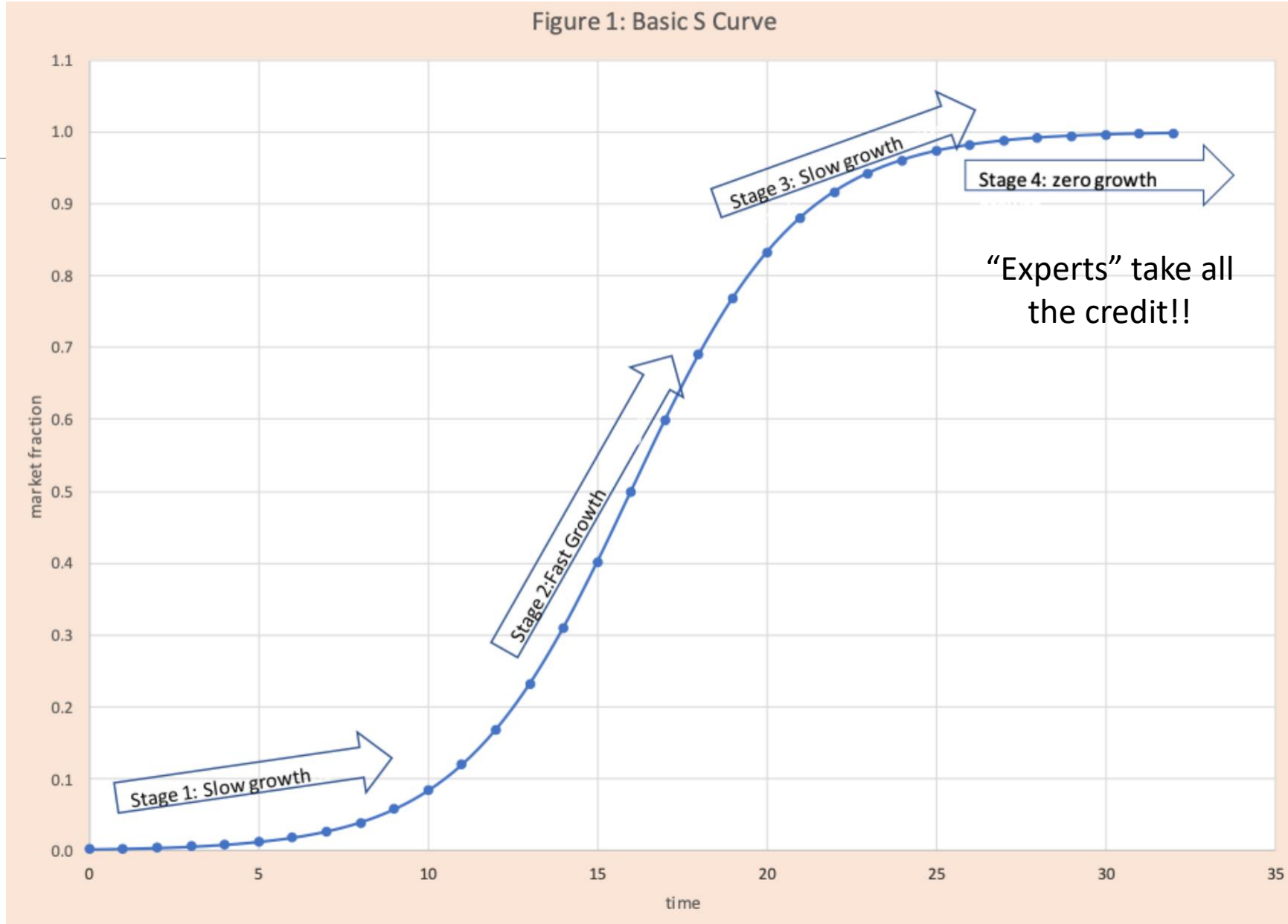
Disruption Innovation



Disruption Innovation



Disruption Innovation

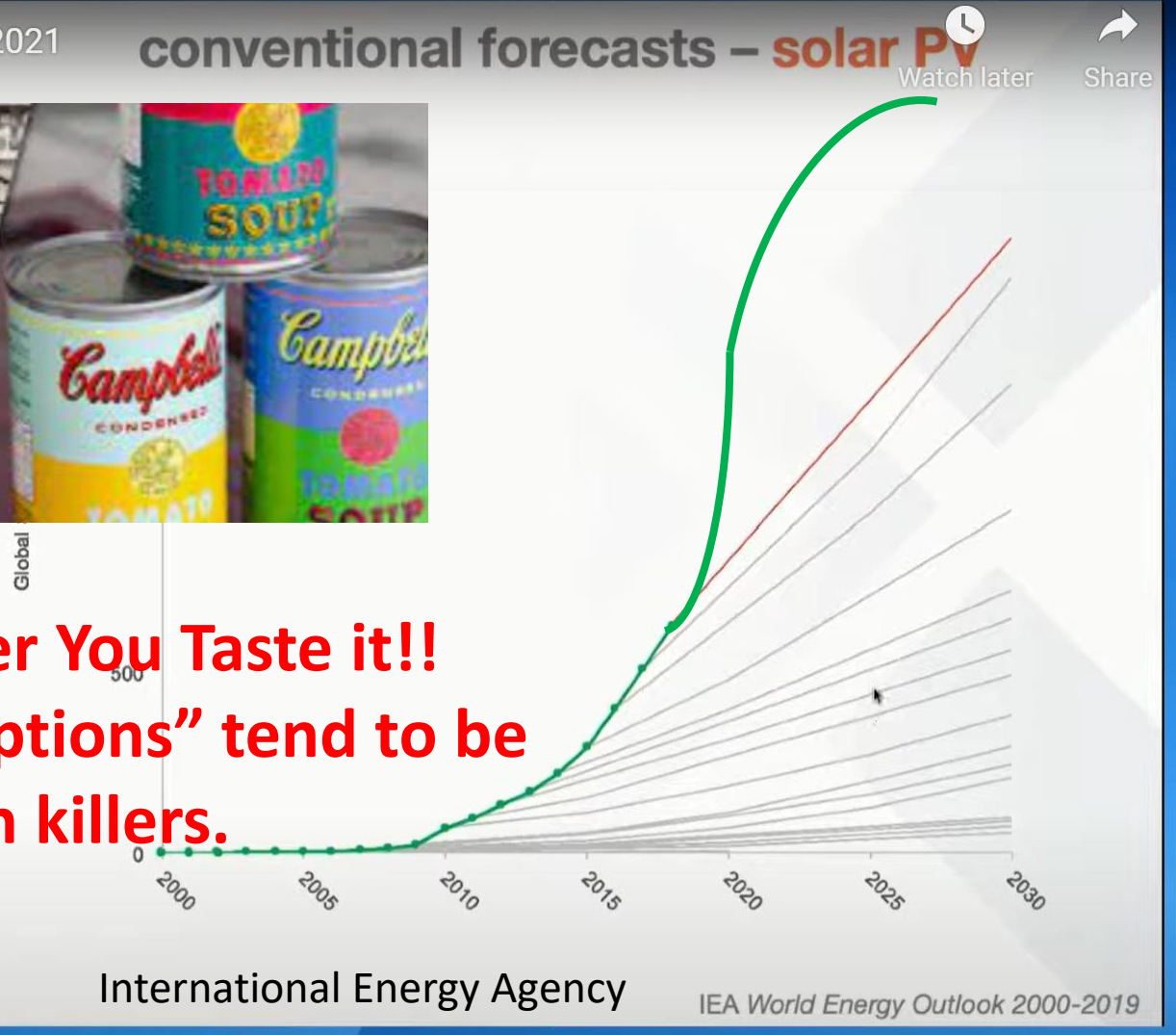


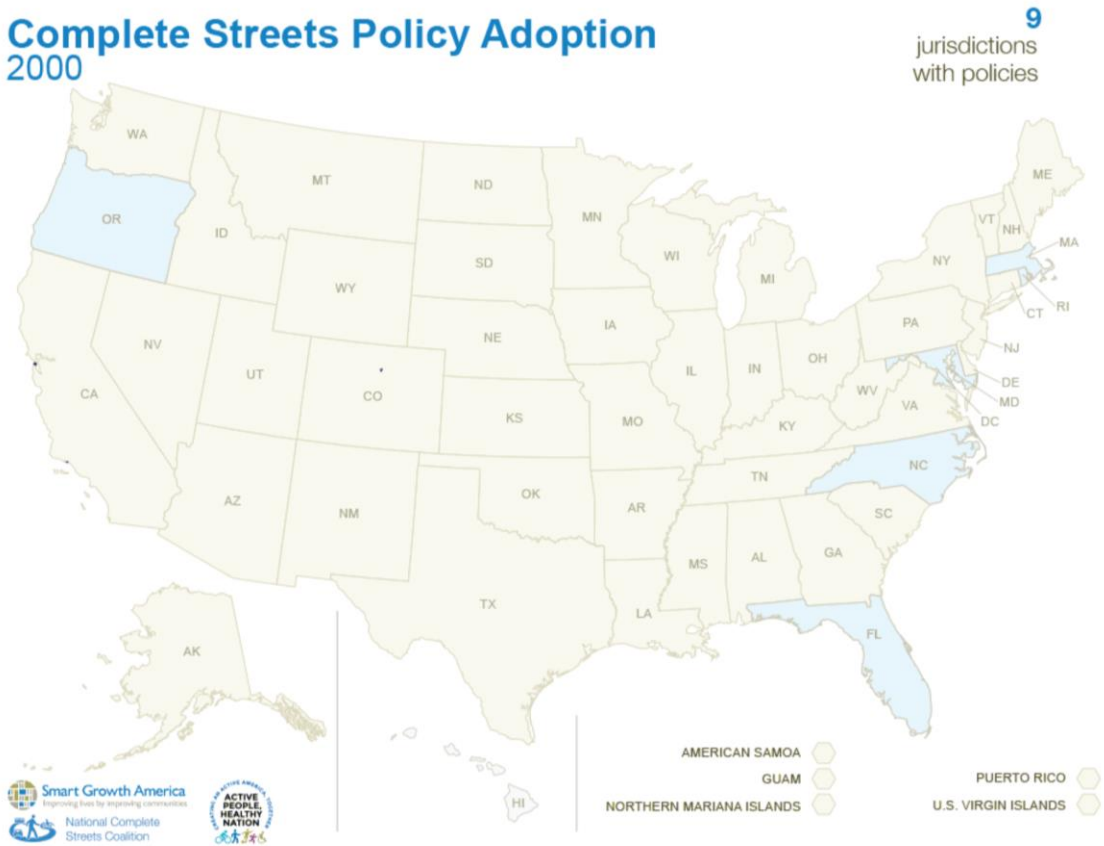
The “experts” usually get it wrong!! – The “S” Curve

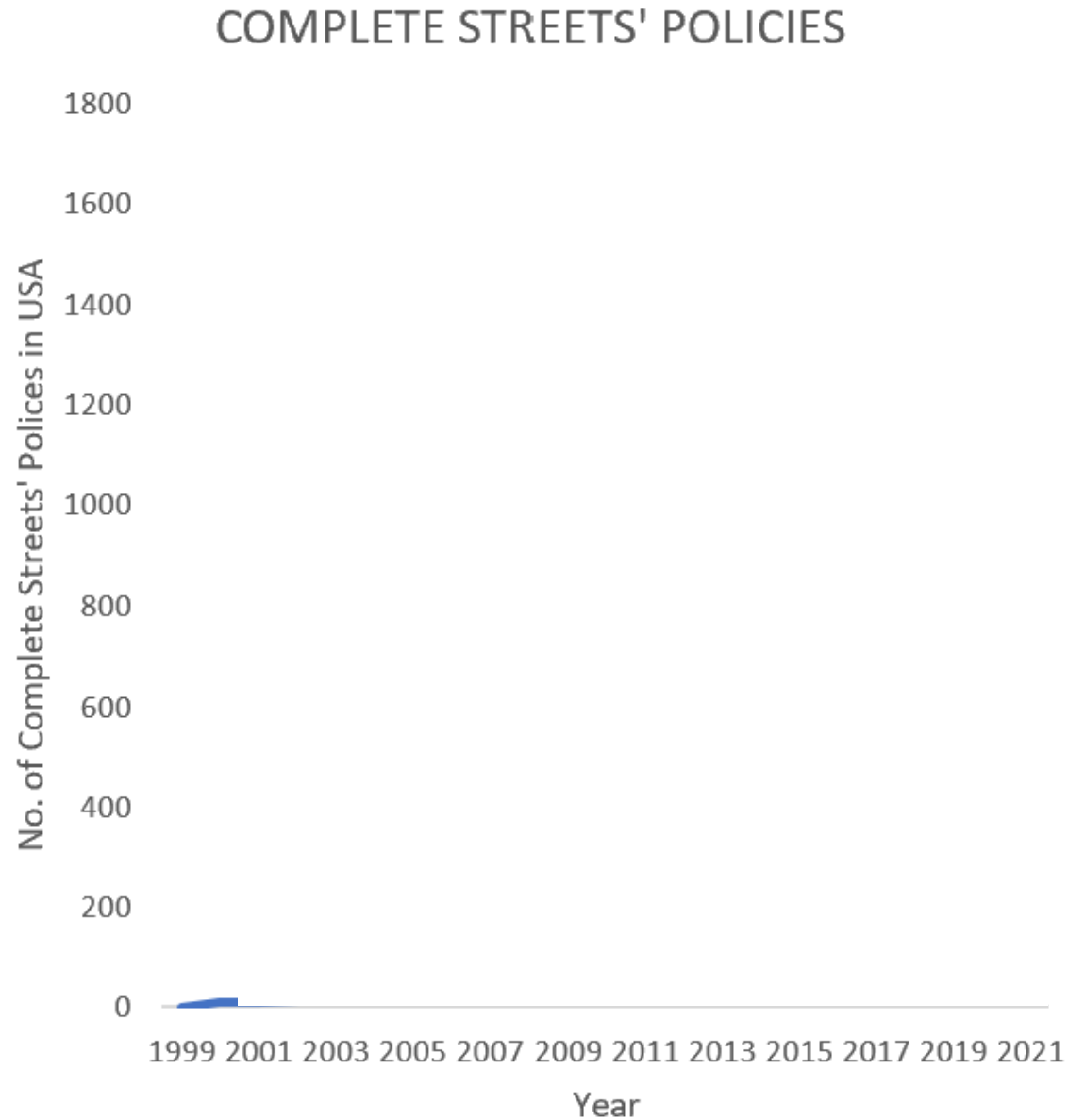
RethinkX Co-Founder Tony Seba at Powur's Scale Up national convention 2021

Add salt Only After You Taste it!!

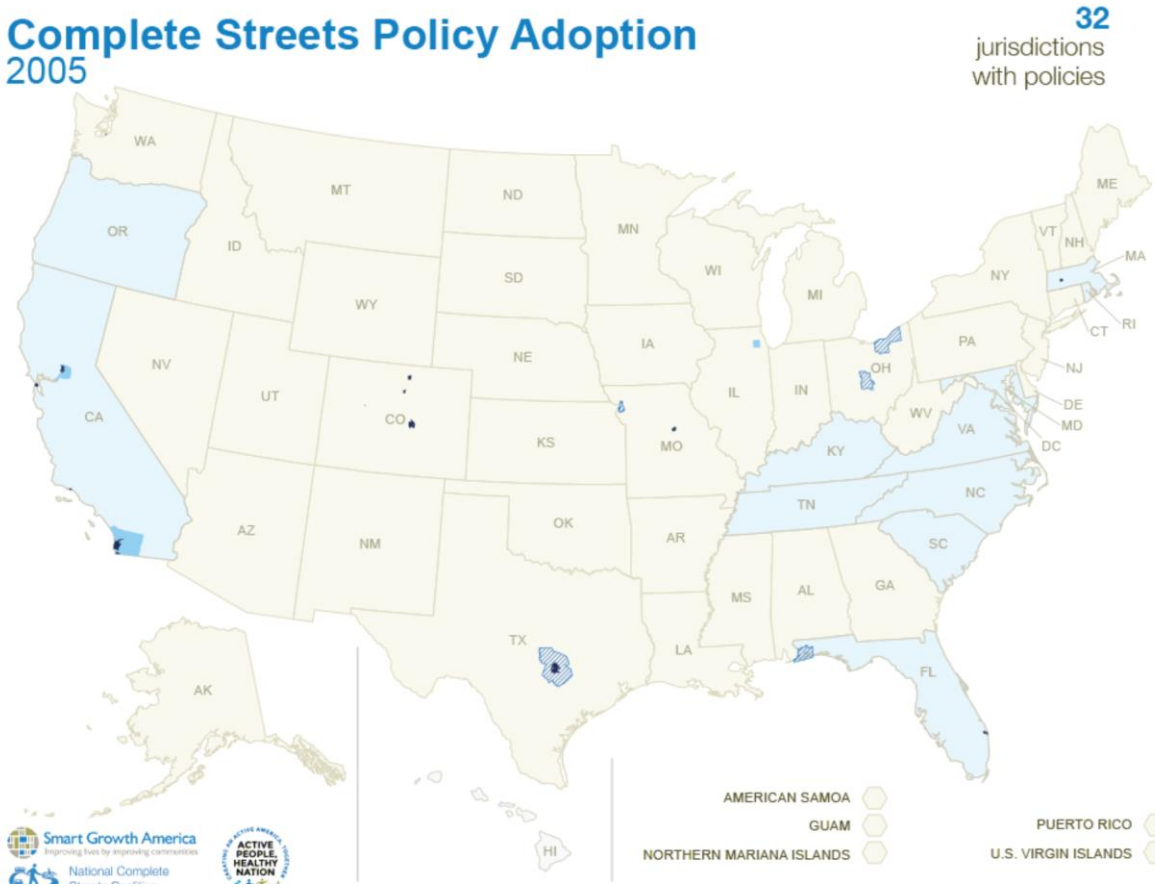
The “Experts’ assumptions” tend to be innovation killers.

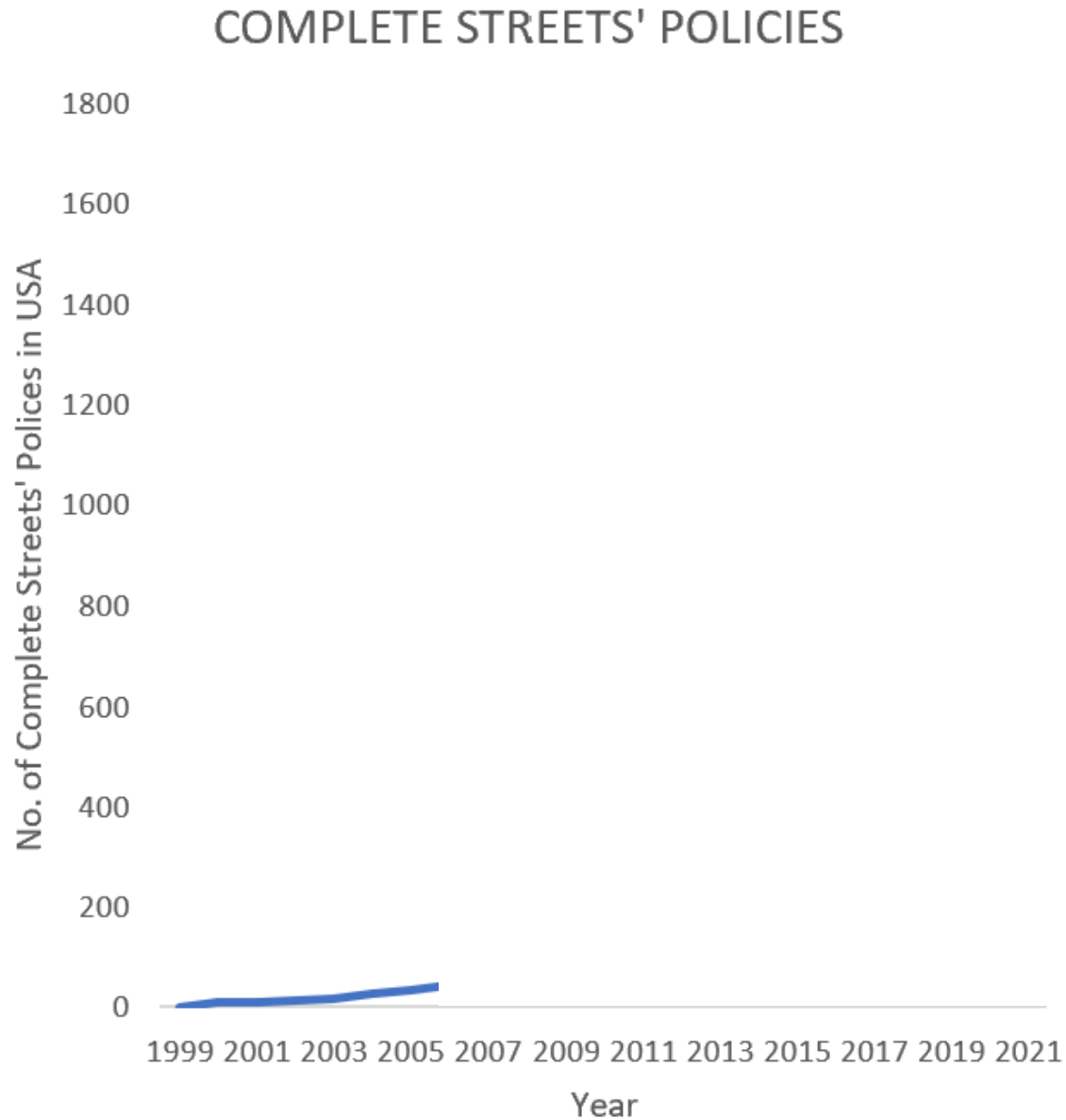




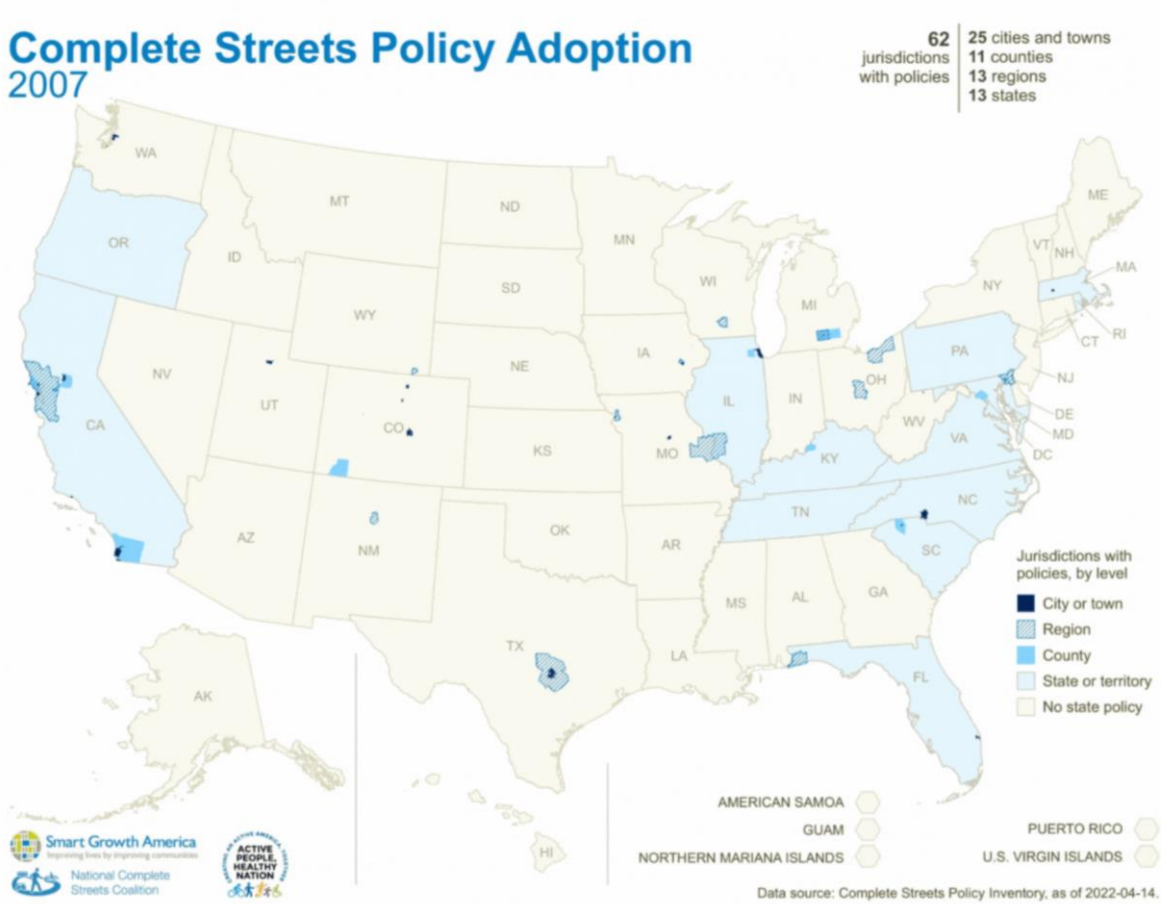


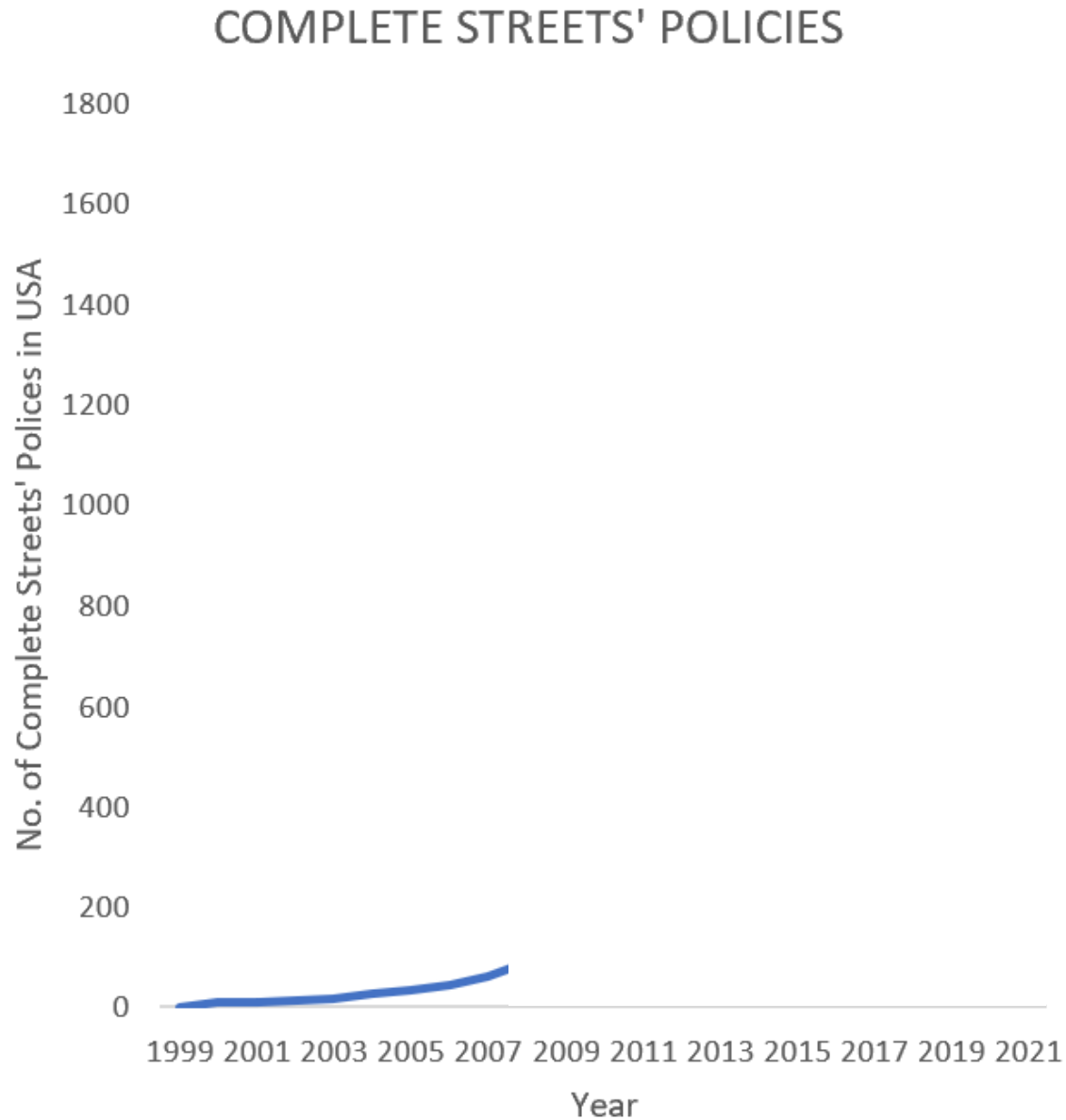
https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e



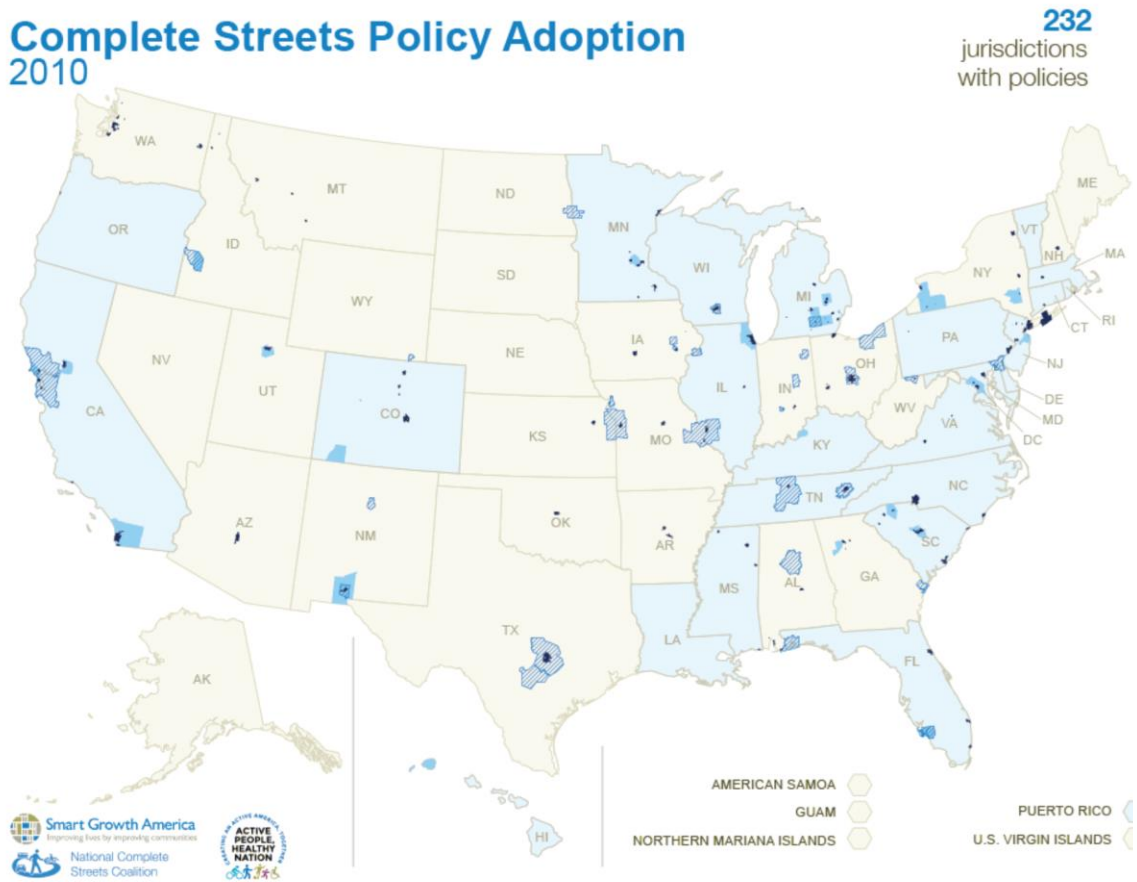


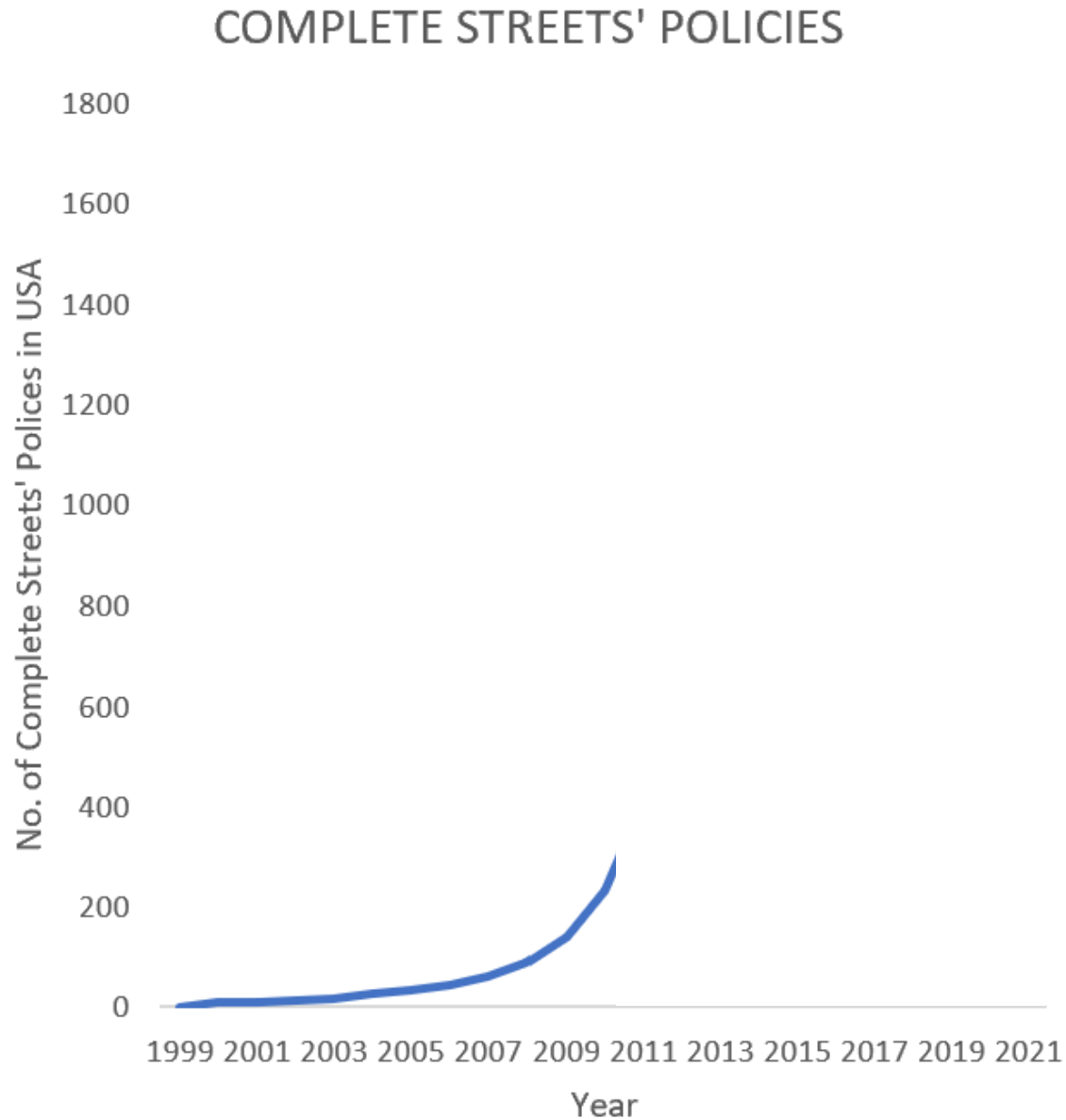
https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e



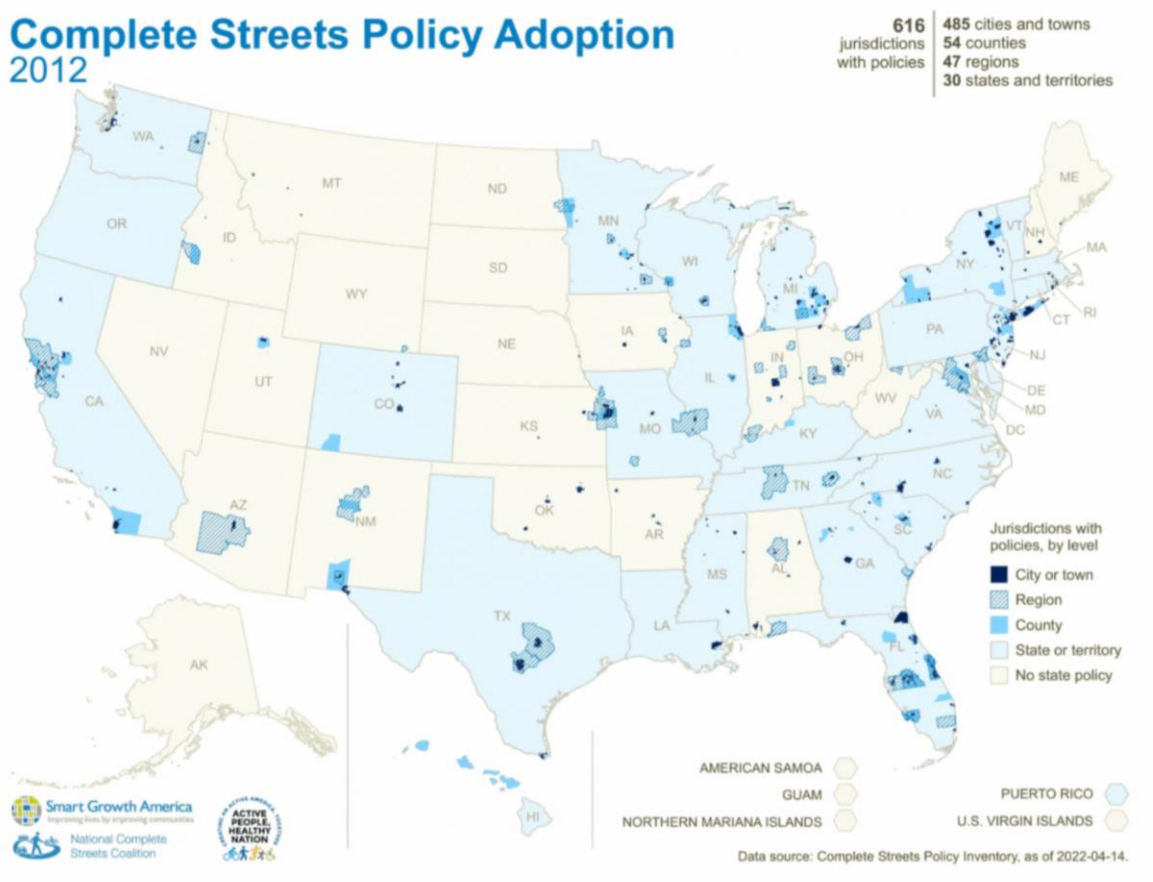


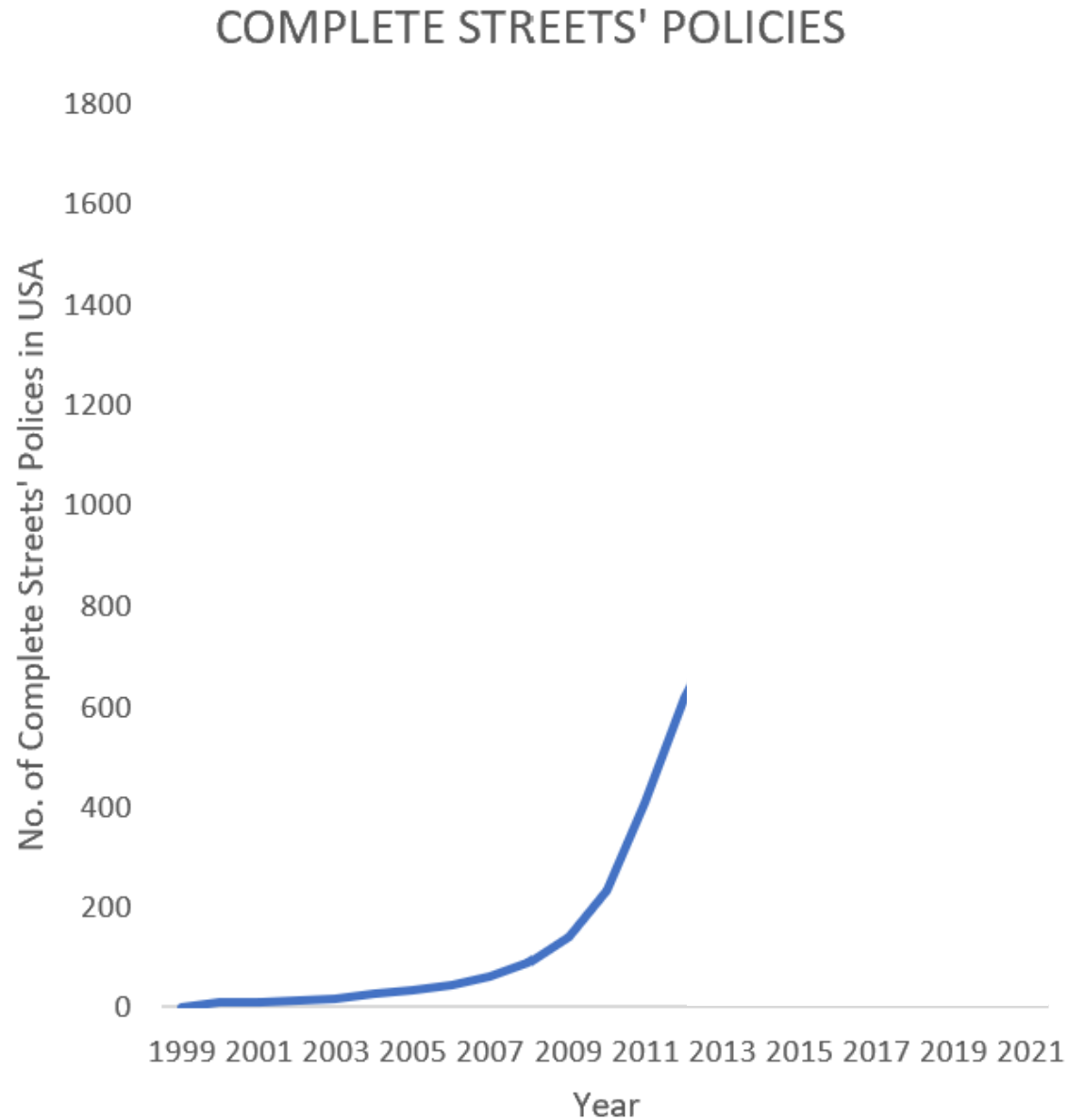
https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e



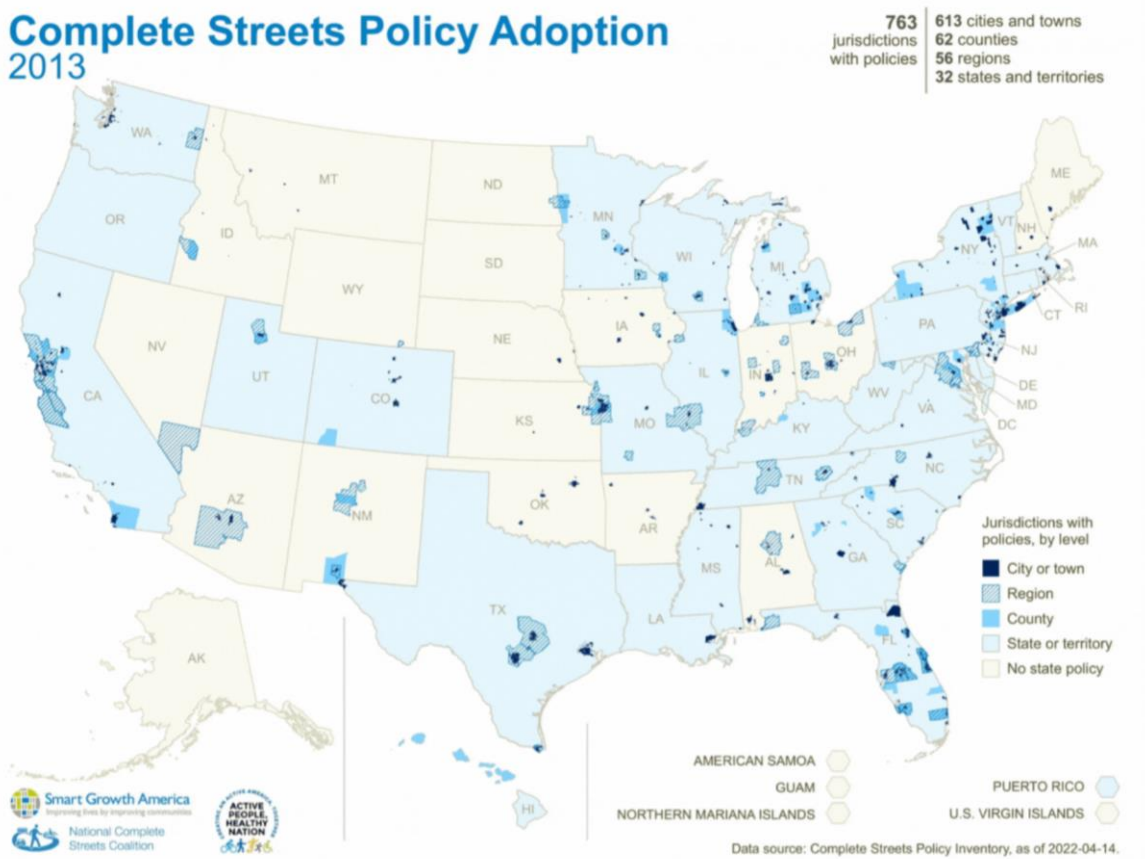


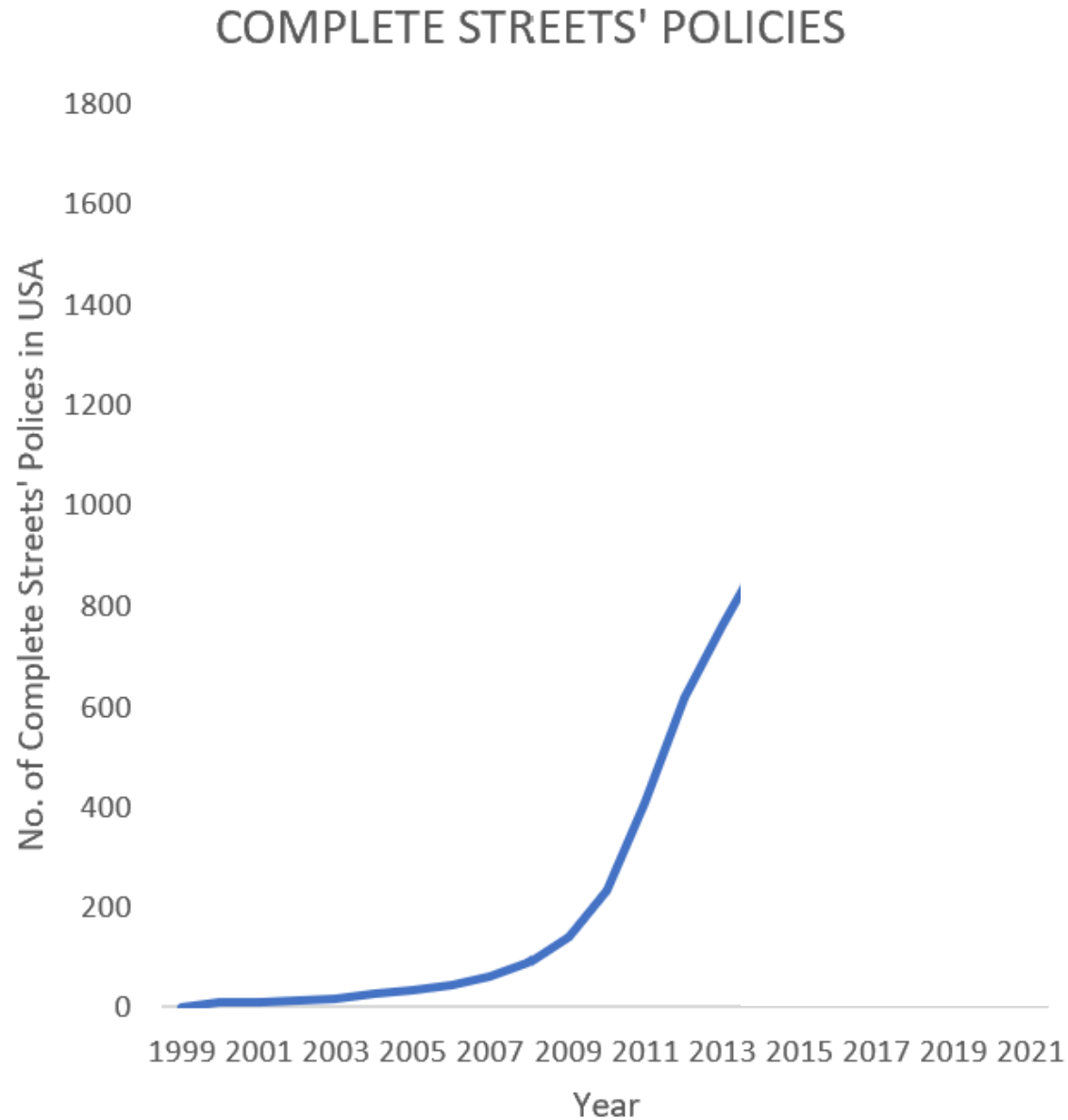
https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e



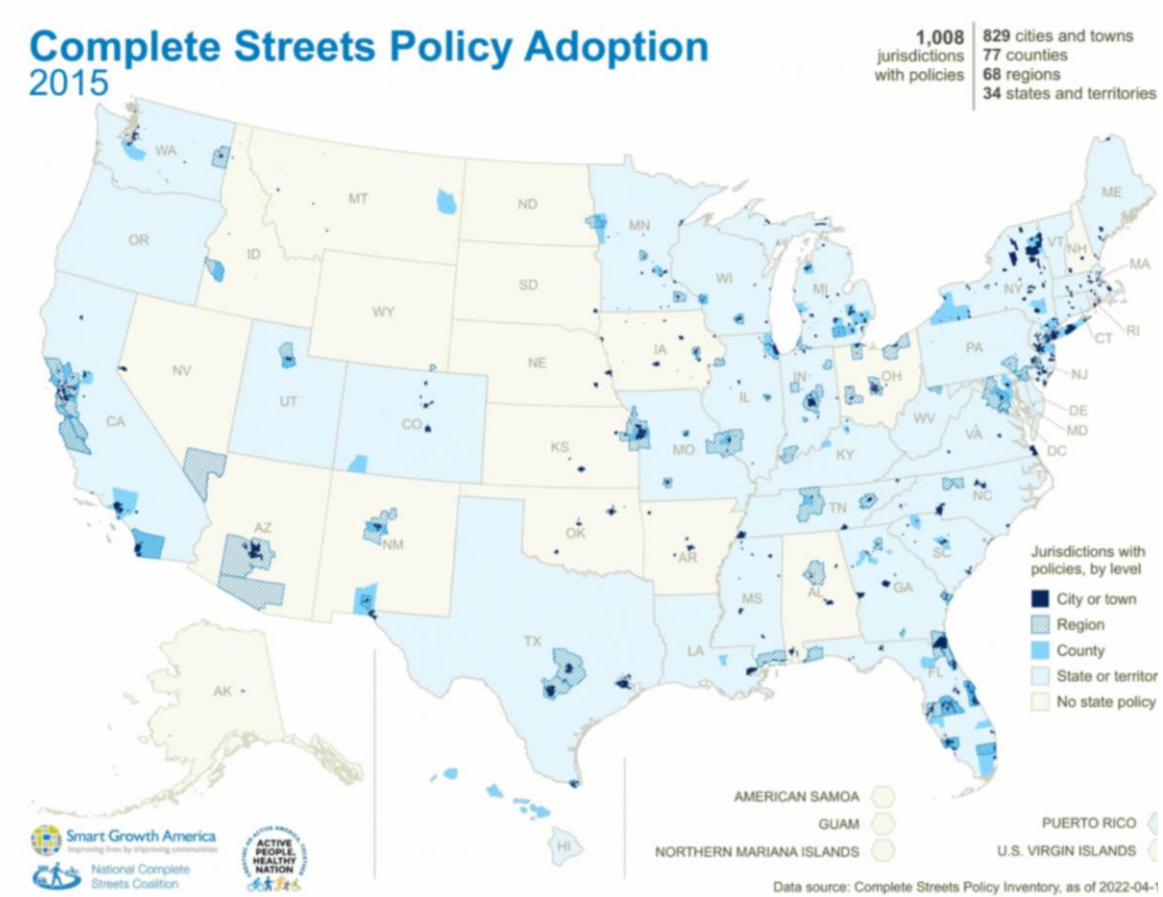


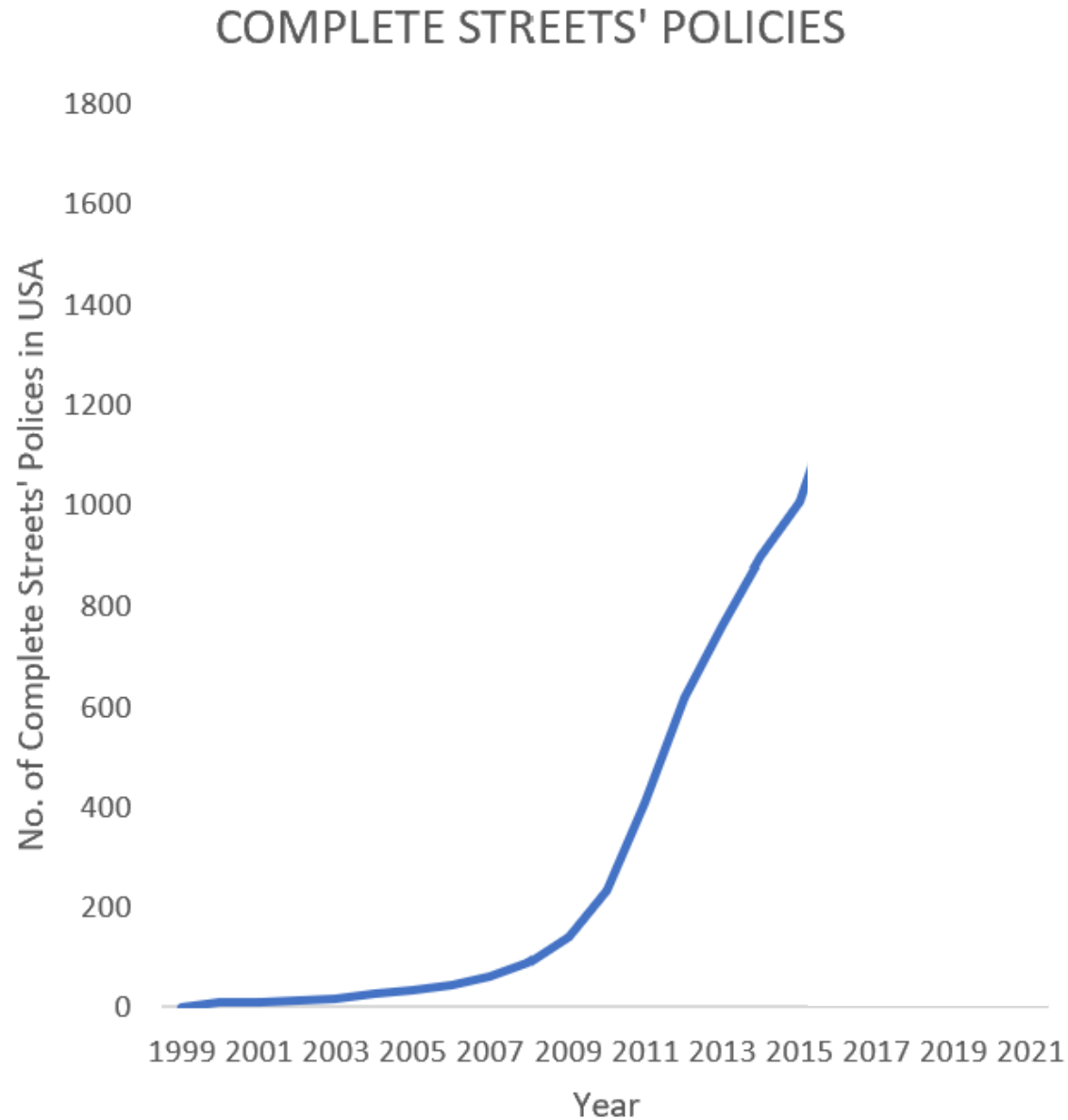
https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e



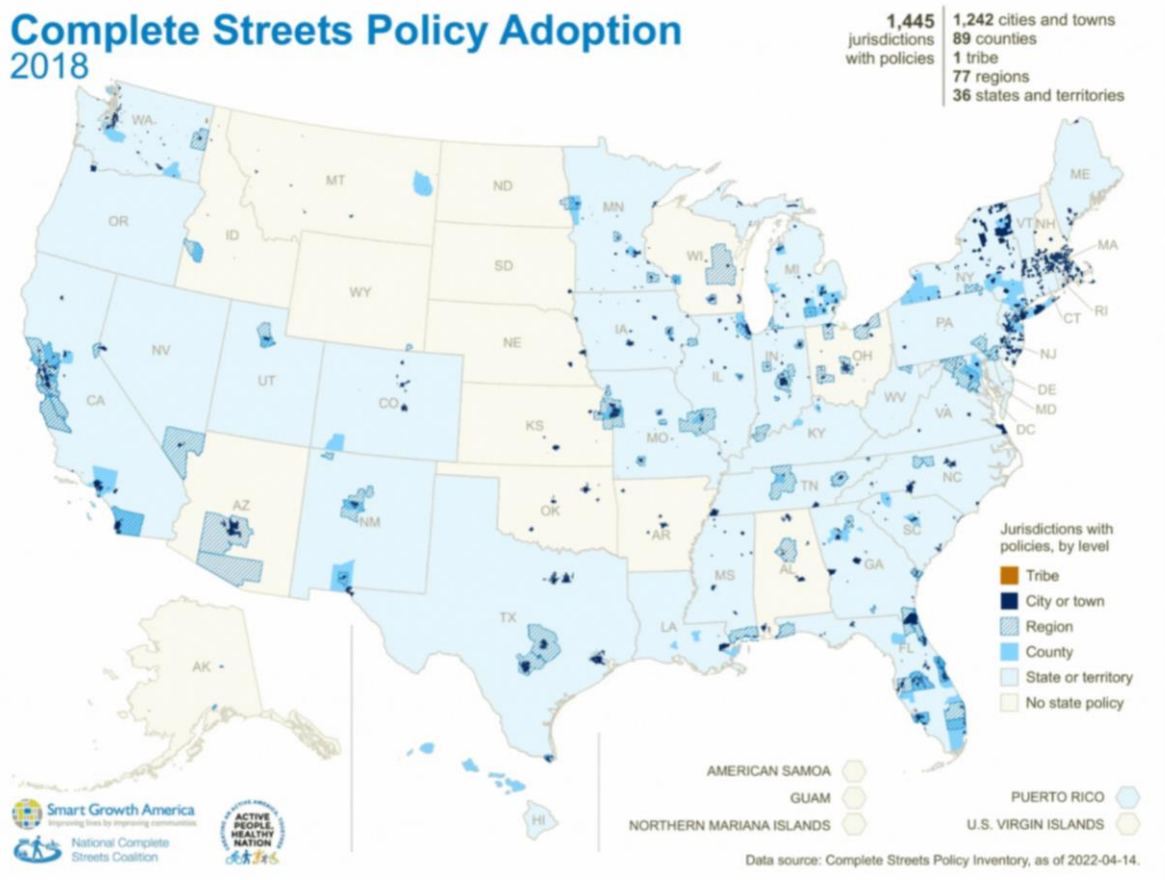


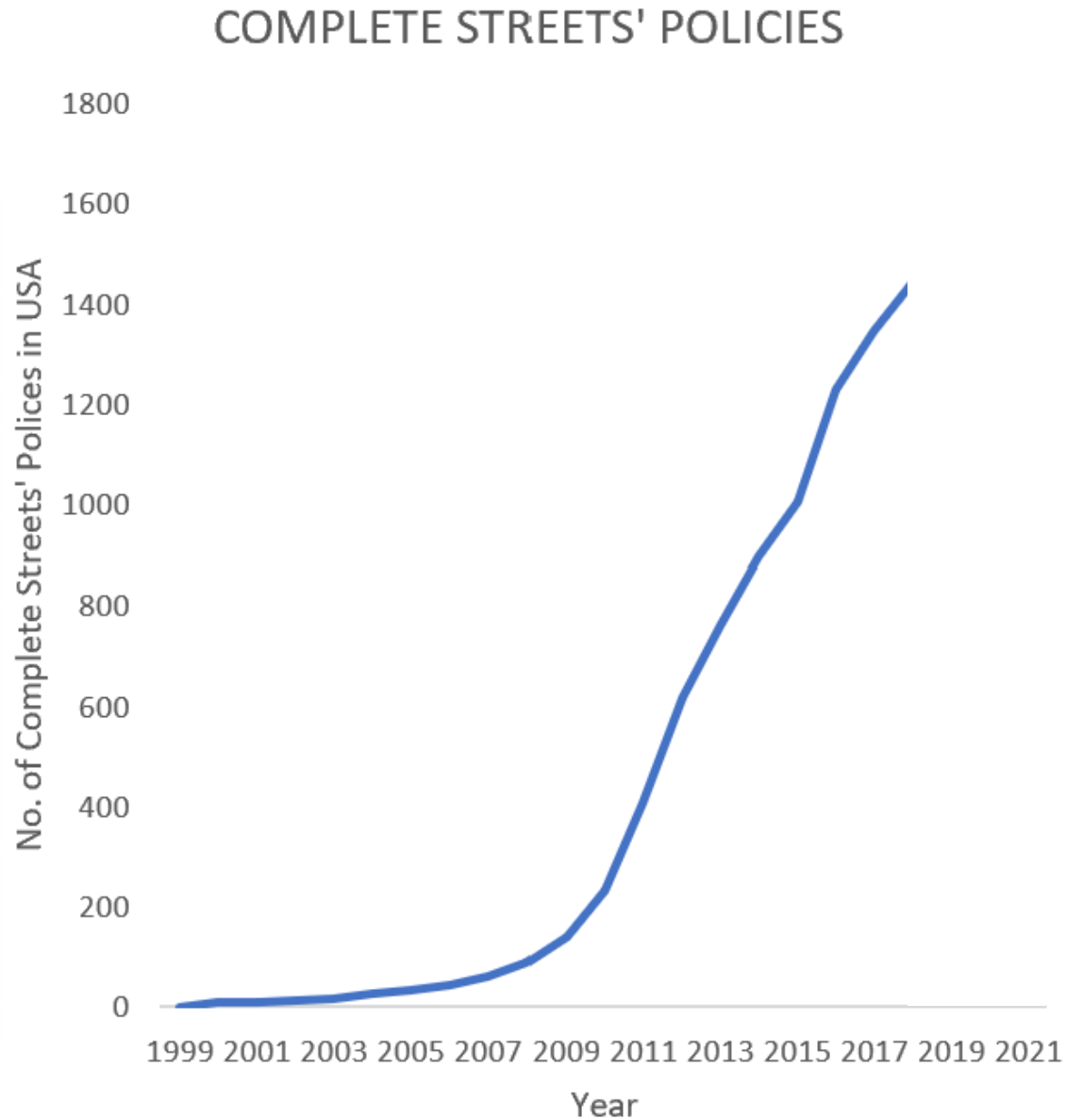
https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e



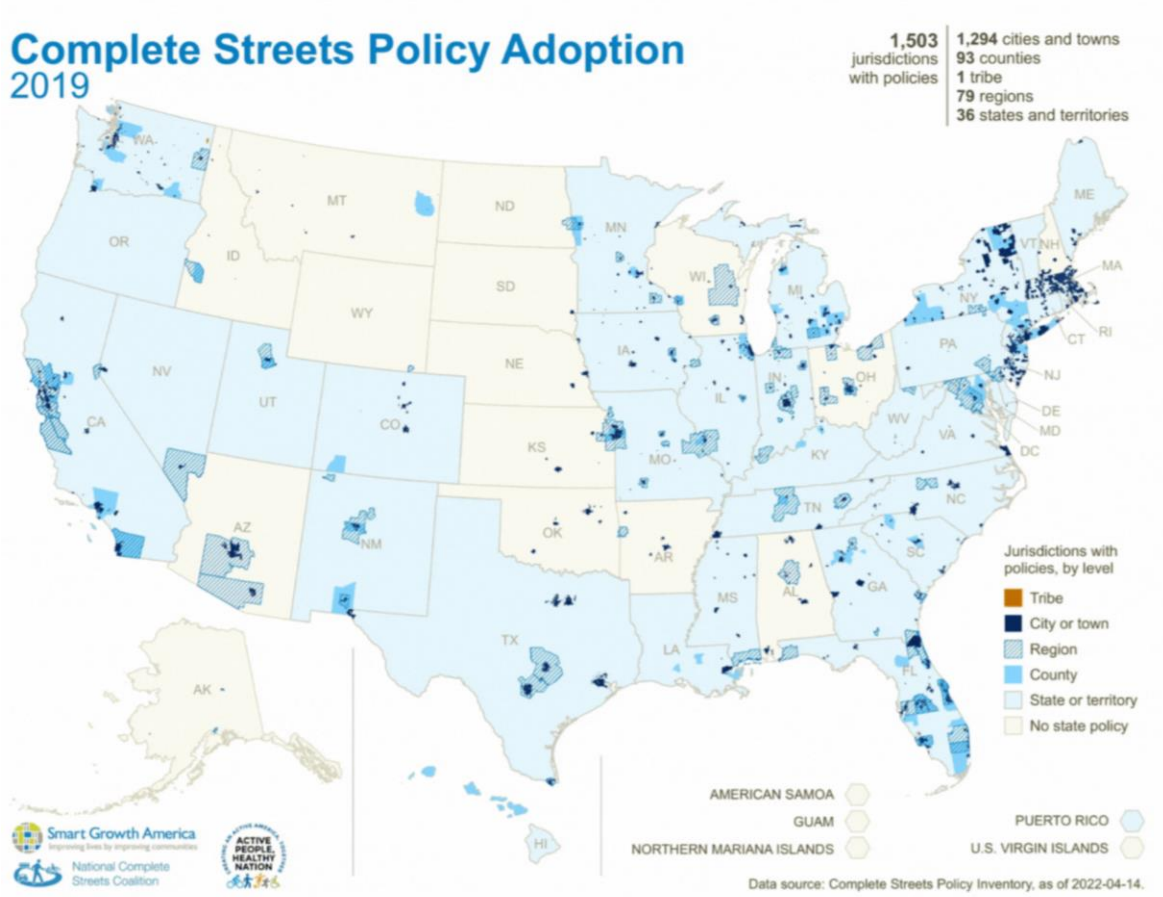


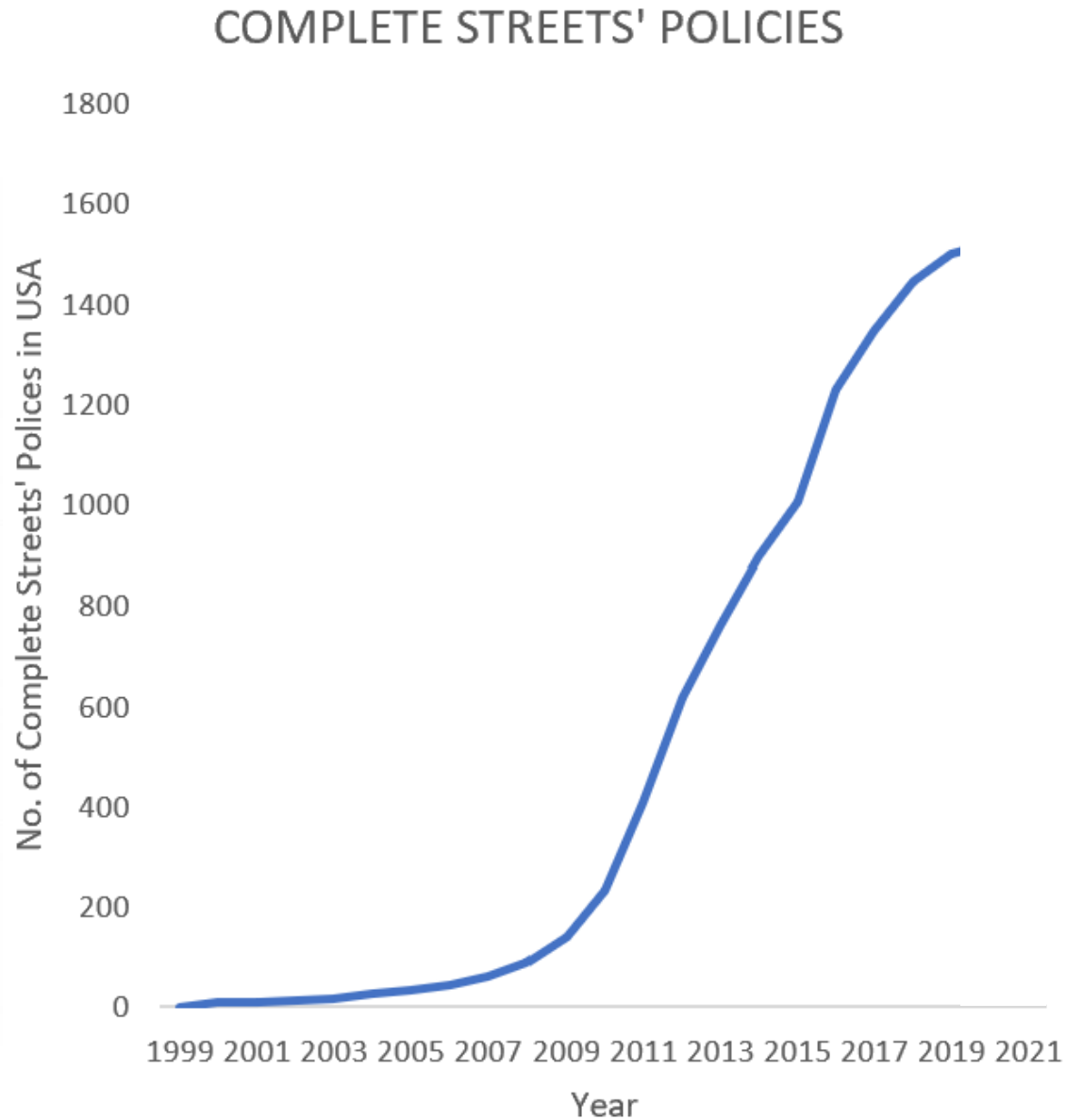
https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e



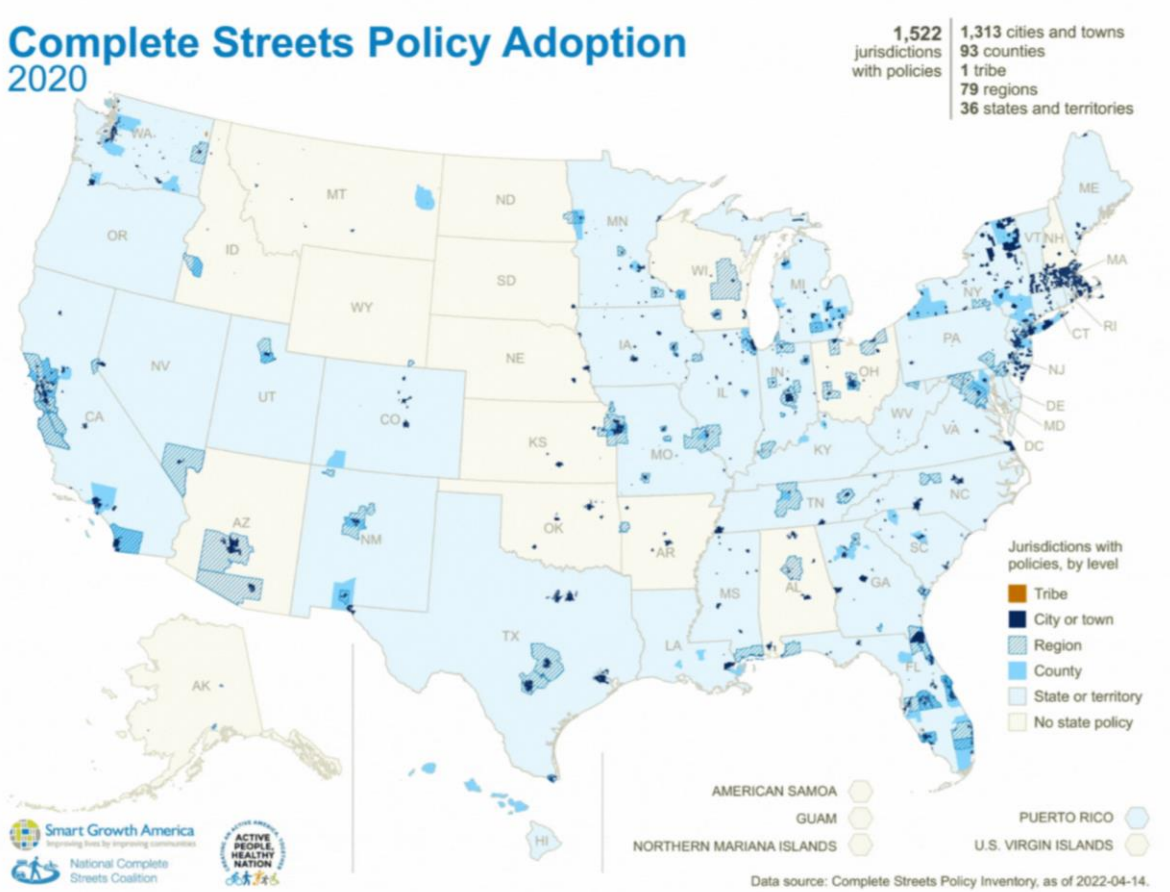


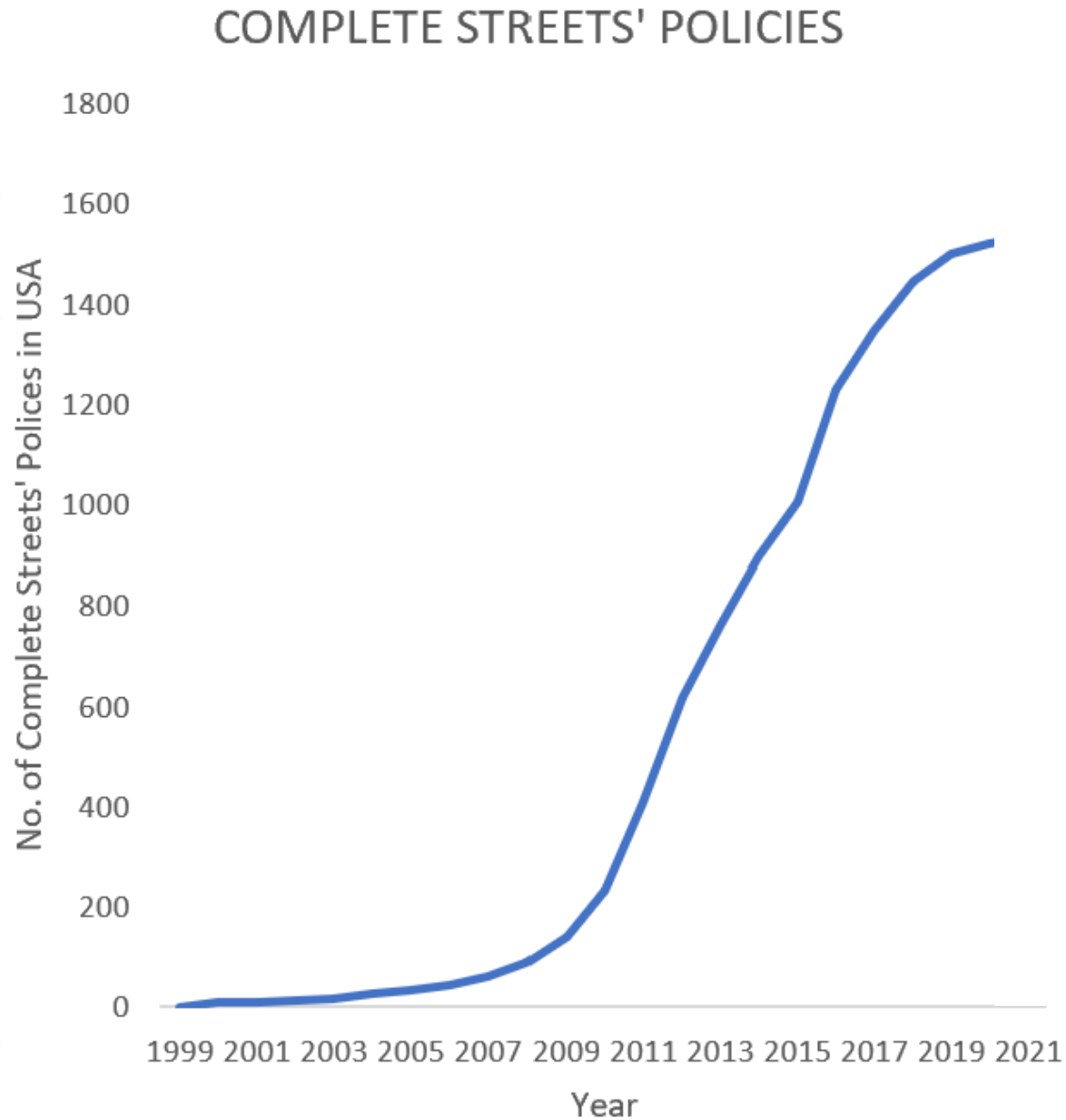
https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e



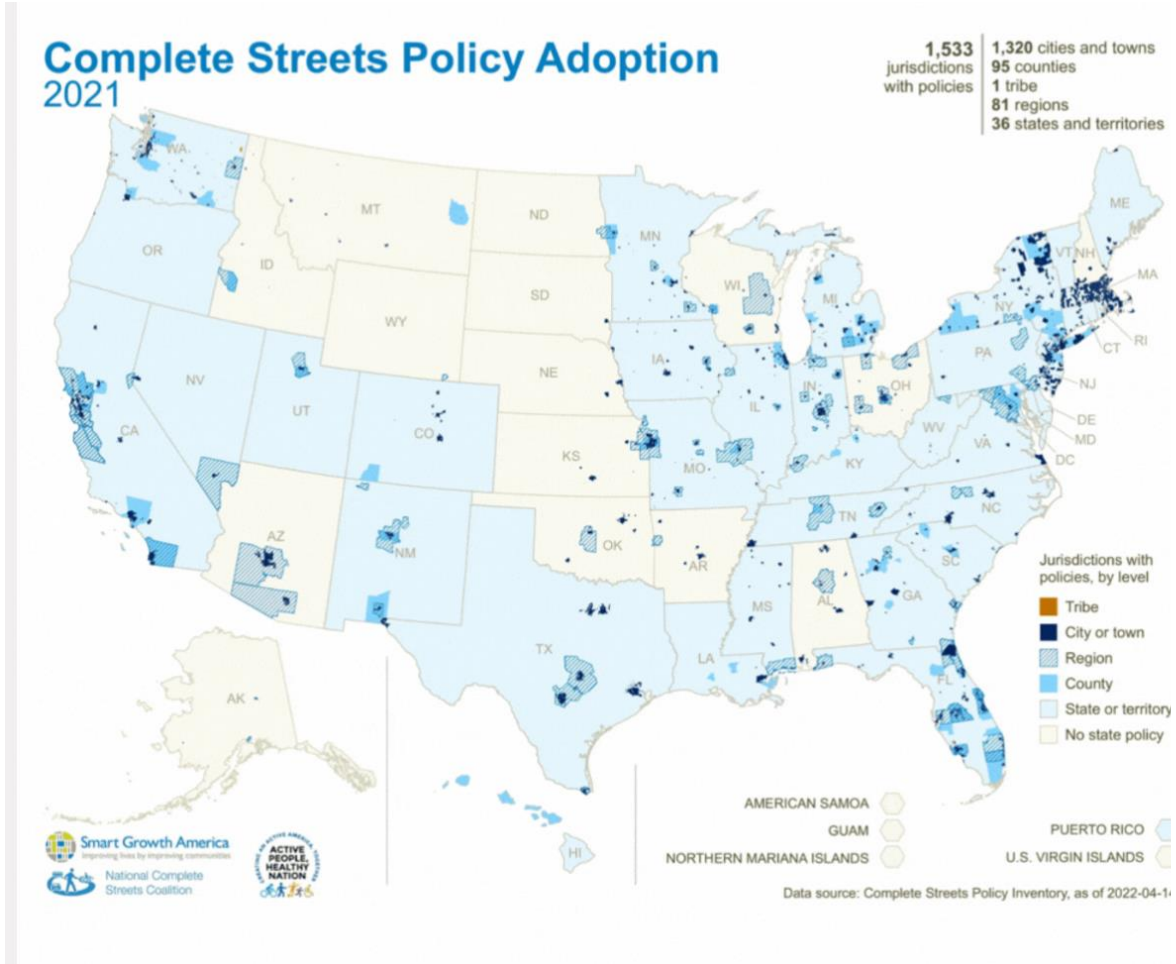


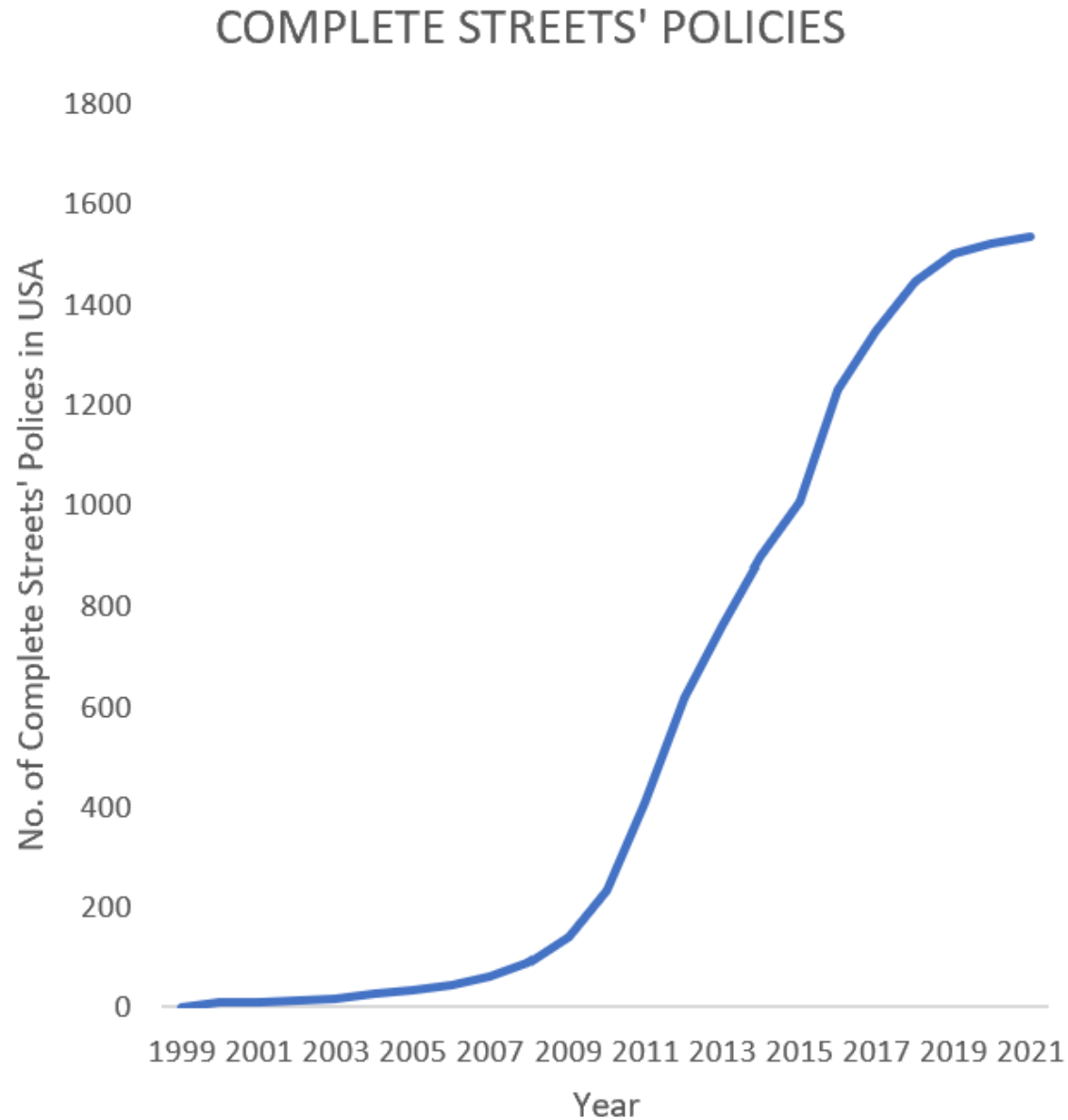
https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e



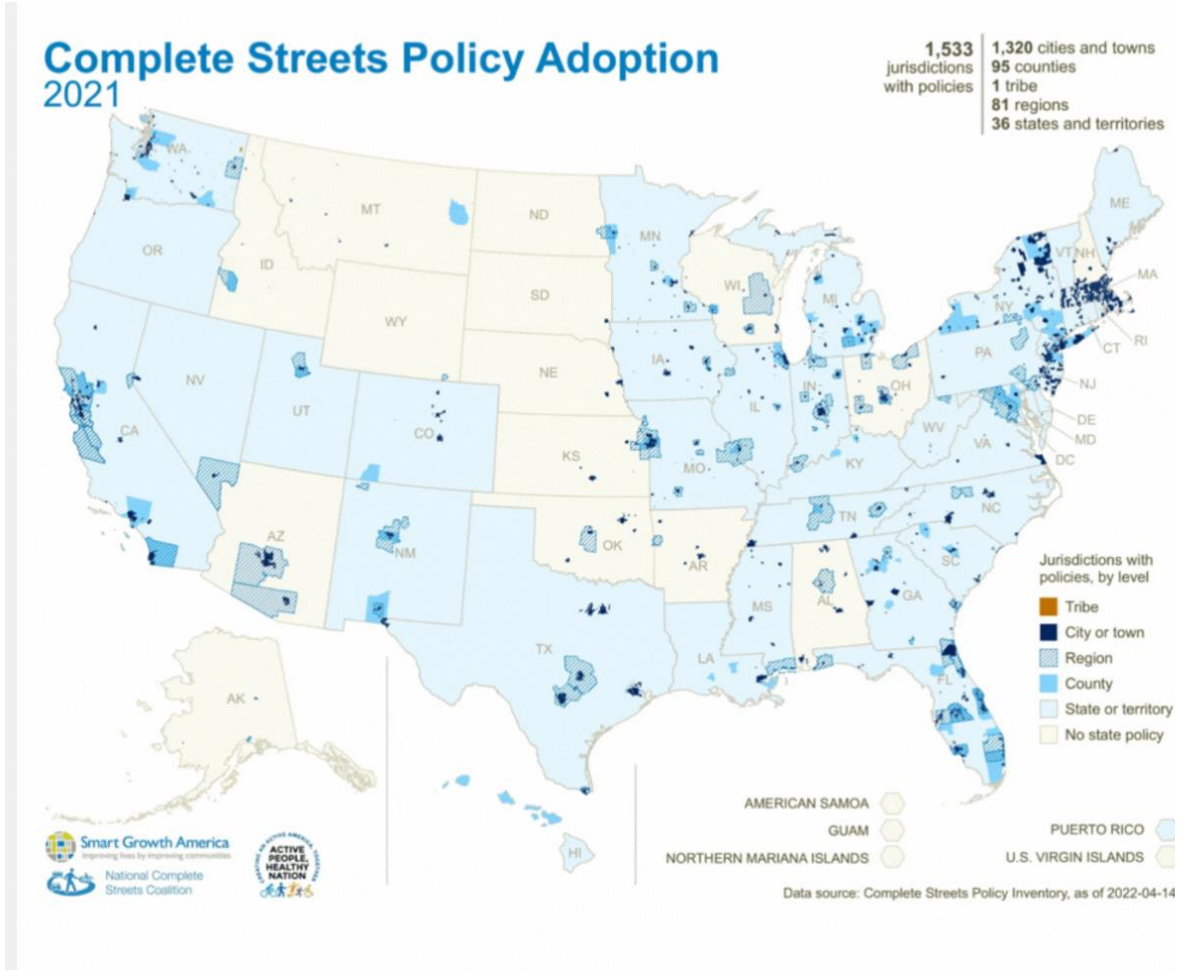


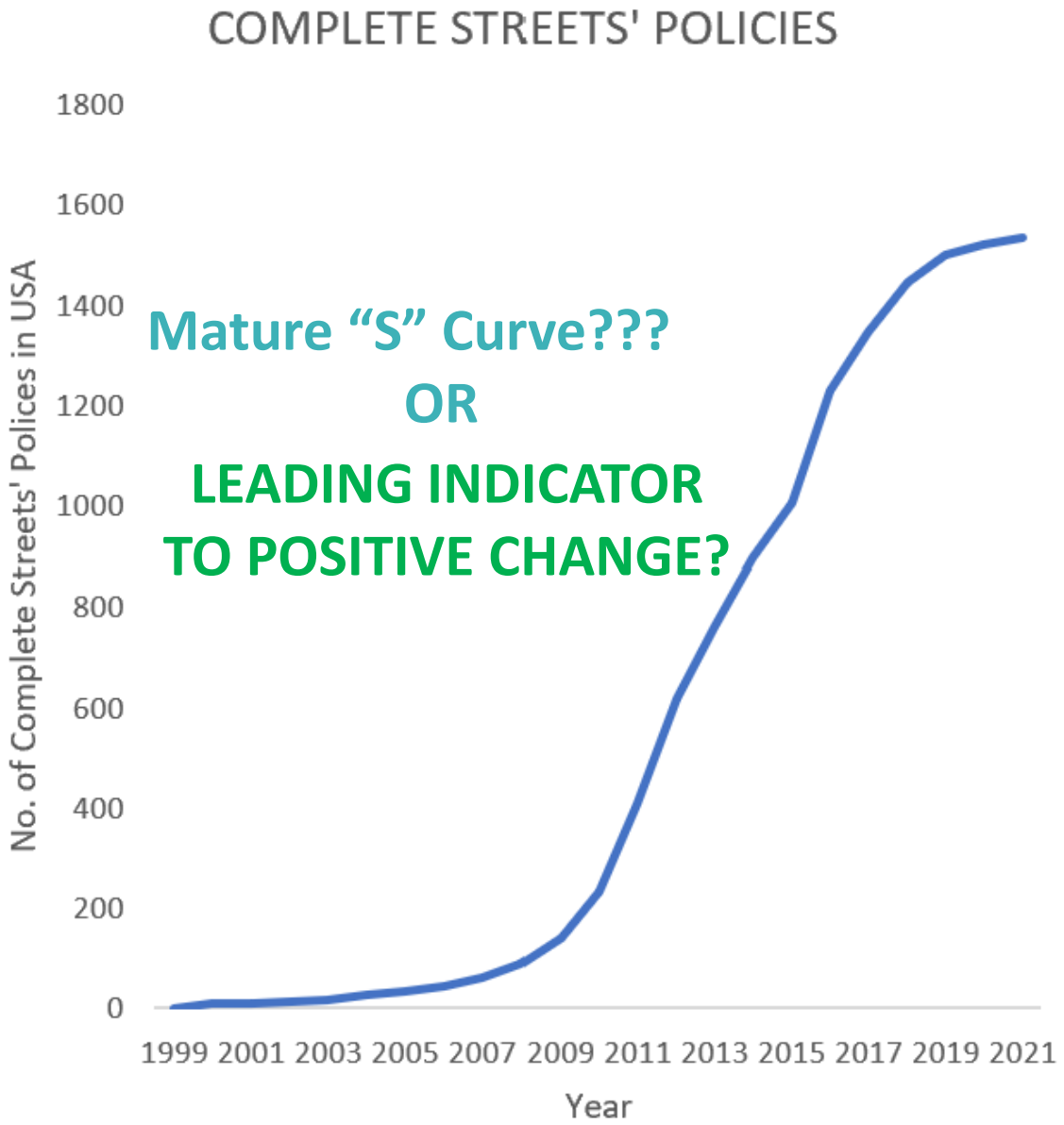
https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e



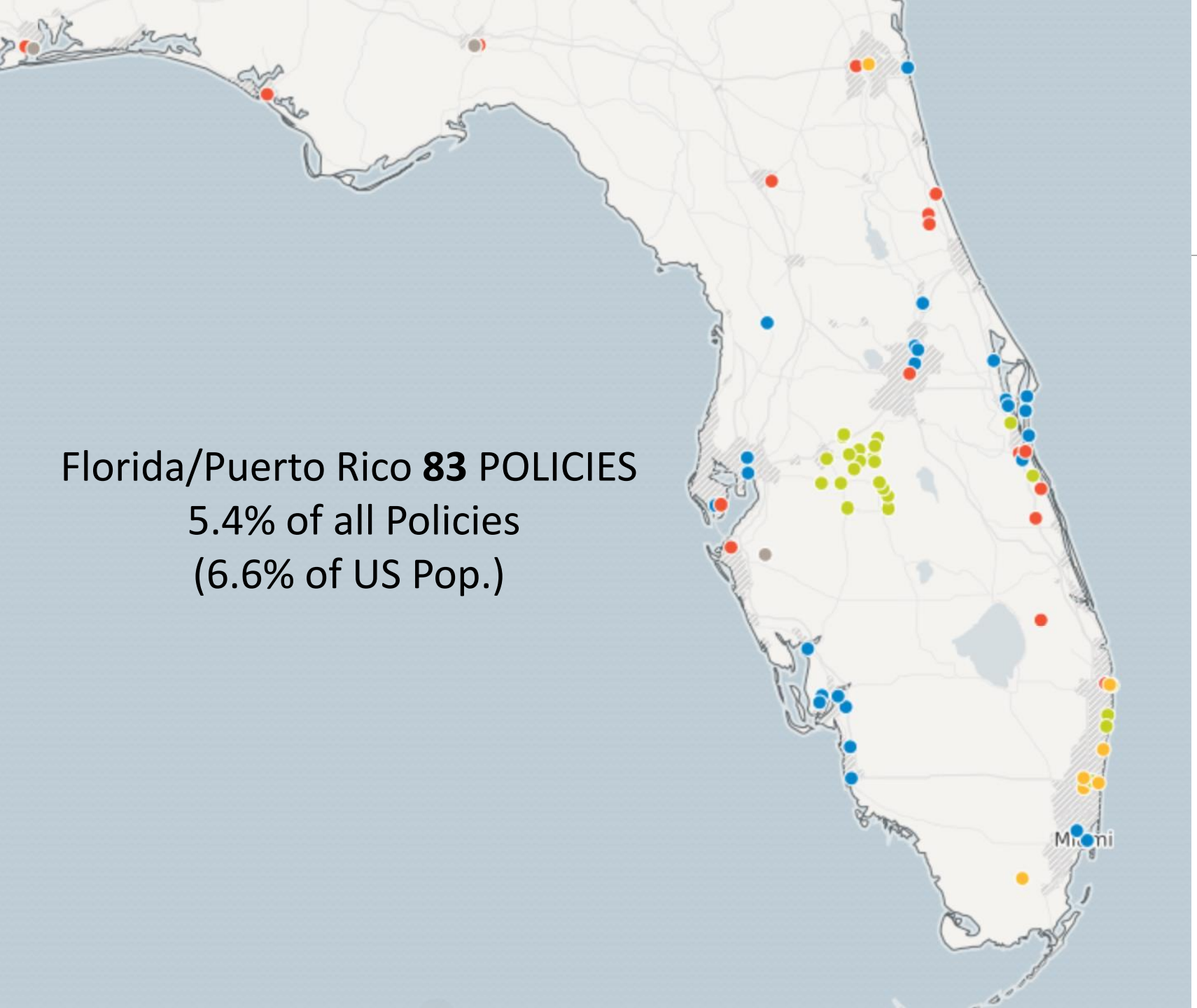


https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e

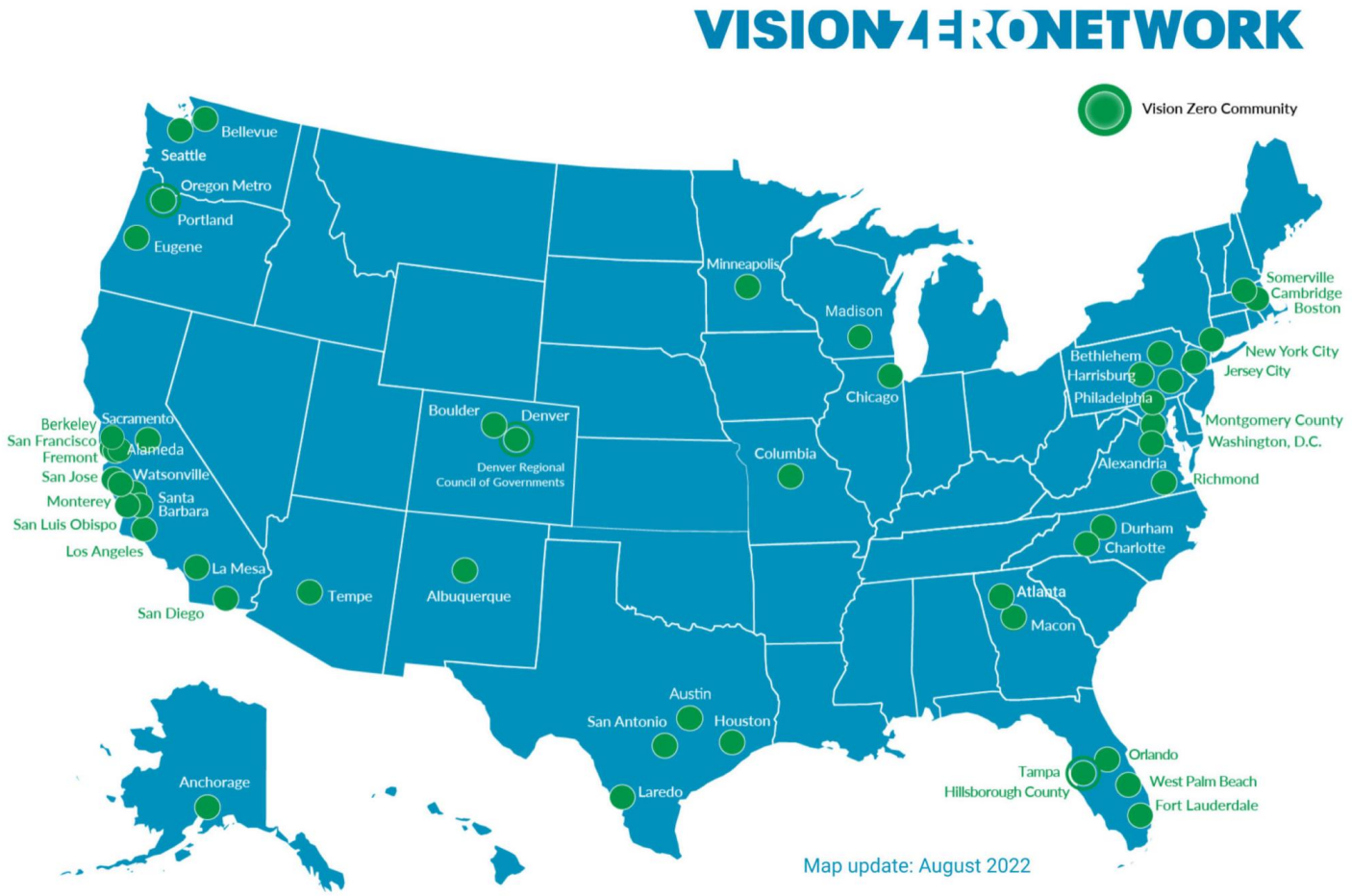


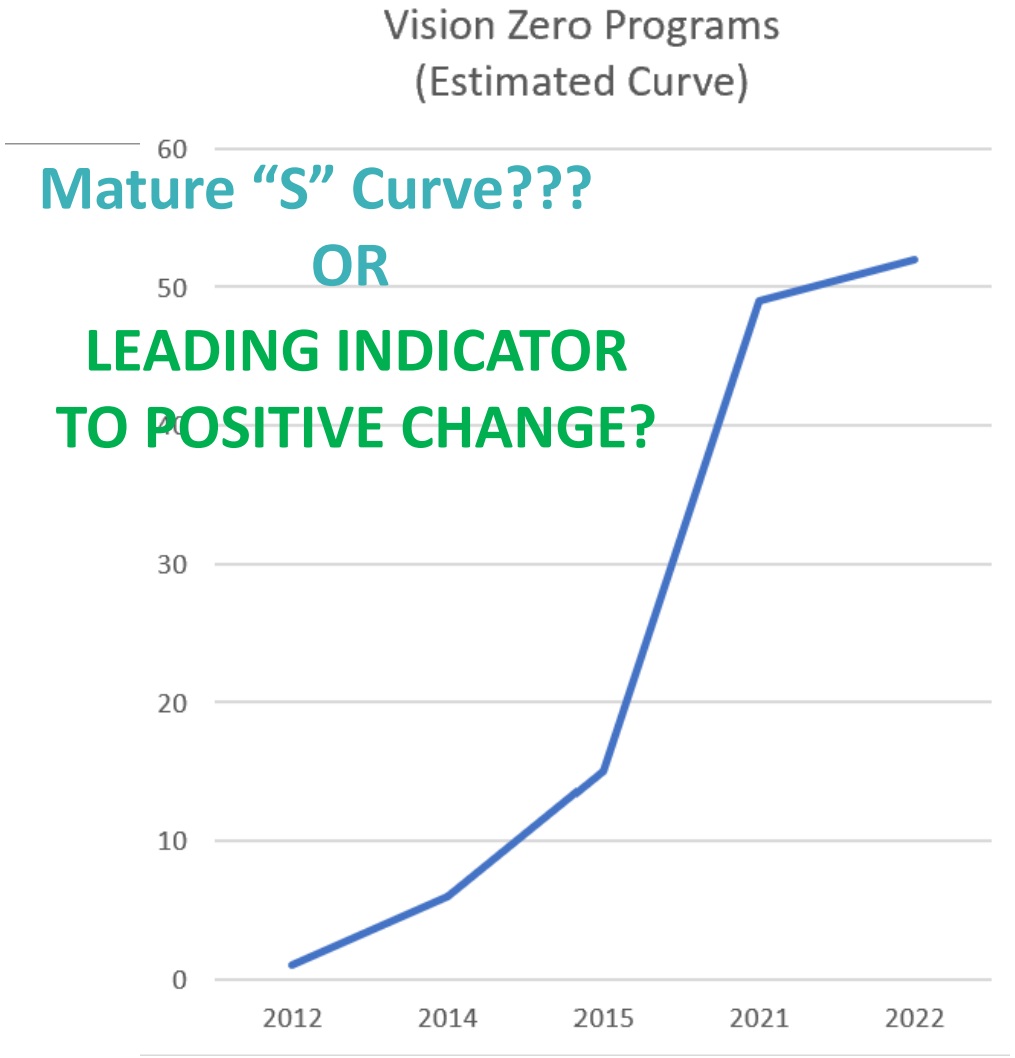


https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/?eType=EmailBlastContent&eId=68084aa7-d120-4c0a-b73a-d9a87bb1a86e



Alachua County, FL	FL	Comprehensive Plan 2011-2030	plan	county	2011	1	194,016	
Auburndale, FL	FL	Complete Streets Policy	pol	city	2012	1	28,794	
Bartow, FL	FL	Complete Streets Policy	pol	city	2012	1	11,354	
Bonita Springs, FL	FL	Resolution	res	city	2014	1	19,041	
Boynton Beach, FL	FL	Complete Street & Mobiliity Policy	pol	city	2020	1	9,043	
Brevard County, FL	FL	Chapter IX Transportation Element	plan	region	2011	1	86,859	
Broward County, FL	FL	Broward Complete Streets Guideline	des	county	2013	1	66,846	
Broward Metropolitan Planning Organizat	FL	Complete Streets Guidelines	des	region	2012	1	5,235	
Bunnell, FL	FL	2030 Plan	plan	city	2011	1	3,008	
Cape Canaveral, FL	FL	Resolution No. 2011-09	res	city	2011	1	115,378	
Cape Coral, FL	FL	Resolution 124-15	res	city	2015	1	21,538,187	
Casselberry, FL	FL	Resolution 19-3118	res	city	2016	1	54,312	
Cocoa Beach, FL	FL	Resolution No. 2011-24	res	city	2011	1	54,312	
Cocoa, FL	FL	Resolution 2011-060	res	city	2011	1	182,760	
Commonwealth of Puerto Rico	PR	Law No. 201/Senate Bill 1857	leg	state	2010	1	3,285,874	
Davenport, FL	FL	Complete Streets Policy	pol	city	2012	1	182,760	
Deerfield Beach, FL	FL	Complete Streets Guidelines	des	city	2013	1	5,100	
Delray Beach, FL	FL	Complete Streets Policy, GA-50, REV	pol	city	2016	1	86,395	
Dundee, FL	FL	Complete Streets Policy	pol	city	2012	1	2,877	
Eagle Lake, FL	FL	Complete Streets Policy	pol	city	2012	1	4,509	
Flagler County, FL	FL	Comprehensive Plan 2010-2035	plan	county	2011	1	180,699	
Florida Department of Transportation	FL	Complete Streets Policy	pol	state	2014	1	251	
Florida-Alabama Transportation Planning	FL	Bicycle & Transportation Plan	plan	region	2005	1	243	
Florida-Alabama Transportation Planning	FL	Bicycle & Pedestrian Master Plan (up	plan	region	2010	1	1,459,762	
Fort Lauderdale, FL	FL	Complete Streets Policy	pol	city	2013	1	159,788	
Fort Lauderdale, FL	FL	Complete Streets Manual	des	city	2013	1	7,543	
Fort Meade, FL	FL	Complete Streets Policy	pol	city	2012	1	7,543	
Fort Myers, FL	FL	Resolution	res	city	2011	1	949,611	
Frostproof, FL	FL	Complete Streets Policy	pol	city	2012	1	6,374	
Grant-Valkaria, FL	FL	Resolution No. 07-2011	pol	city	2011	1	1,537	
Haines City, FL	FL	Complete Streets Policy	pol	city	2012	1	16,361	
Highland Park, FL	FL	Complete Streets Policy	pol	city	2012	1	112,641	
Hillcrest Heights, FL	FL	Complete Streets Policy	pol	city	2012	1	760,822	
Hillsborough County Metropolitan Planni	FL	Resolution 2012-1	res	region	2012	1	760,822	
Indian River County, FL	FL	Comprehensive Plan	plan	county	2016	1	15,087	
Inverness, FL	FL	Resolution 2016-06	res	city	2016	1	399,710	
Inverness, FL	FL	Resolution No. 2017-10	res	city	2017	1	399,710	
Jacksonville, FL	FL	2030 Mobility Plan	plan	city	2011	1	158,431	
Lake Alfred, FL	FL	Complete Streets Policy	pol	city	2012	1	84,678	
Lake Hamilton, FL	FL	Complete Streets Policy	pol	city	2012	1	2,701,767	
Lake Wales, FL	FL	Complete Streets Policy	pol	city	2012	1	2,701,767	
Lakeland, FL	FL	Complete Streets Policy	pol	city	2012	1	442,241	
Lee County Metropolitan Planning Organ	FL	Resolution 09-05	res	region	2009	1	3,952	
Lee County, FL	FL	Resolution No. 09-11-13	res	county	2009	1	19,115	
Longwood, FL	FL	Resolution 15-1376	res	city	2015	1	7,217	
Manatee County, FL	FL	Ordinance No. 1303	leg	county	2013	1	1,577,589	
Manatee County, FL	FL	Resolution R-16-036	res	county	2016	1	1,429,908	
Martin County, FL	FL	Comprehensive Plan: Transportation	plan	county	2011	1	307,573	
Melbourne, FL	FL	Comprehensive Plan Amendment	plan	city	2011	1	119,760	
Miami-Dade County, FL	FL	Resolution R-995-14	res	county	2014	1	1,492,191	
Miami-Dade County, FL	FL	Complete Streets Design Guidelines	des	county	2017	1	1,492,191	
Miami, FL	FL	Resolution 09-00274	res	city	2009	1	89,258	
Mulberry, FL	FL	Complete Streets Policy	pol	city	2012	1	13,323	
Naples, FL	FL	Resolution 15-13719	res	city	2015	1	83,310	
Neptune Beach, FL	FL	Resolution No. 2018-07	res	city	2018	1	54,312	
North Florida, TPO	FL	Technical Memorandum #9 Context	des	region	2014	1	2,713	
Orange City, FL	FL	Resolution No. 643-11	res	city	2011	1	725,046	
Orlando, FL	FL	Complete Streets GMP Amendment	plan	city	2015	1	725,046	
Palm Bay, FL	FL	Resolution No. 2011-22	res	city	2011	1	19,471	
Palm Beach Transportation Planning Ager	FL	Complete Streets Policy	pol	region	2016	1	27,678	
Palm Beach Transportation Planning Ager	FL	Complete Streets Design Guidleines	des	region	2017	1	11,226	
Palm Coast, FL	FL	2035 Comprehensive Plan	plan	city	2010	1	133,563	
Palmetto, FL	FL	Ordinance 2013-11 Amending the C	plan	city	2013	1	258,308	
Panama City, FL	FL	City of Panama City 2035 Plan	plan	city	2015	1	258,308	
Pensacola, FL	FL	Ordinance No. 06-21	leg	city	2021	1	258,308	
Polk City, FL	FL	Complete Streets Policy	pol	city	2012	1	21,538,187	
Polk County TPO, FL	FL	Polk County Complete Streets Hand	des	region	2012	1	196,169	
Polk County, FL	FL	Complete Streets Policy	pol	county	2012	1	384,959	
Punta Gorda, FL	FL	Resolution 3047-13	res	city	2013	1	48,789	
Rockledge, FL	FL	Resolution No. 2011-695	res	city	2011	1	25,924	
Satellite Beach, FL	FL	Resolution NO 948	res	city	2014	1	117,415	
Space Coast Transportation Planning Org	FL	Resolution 11-22	pol	region	2011	1	49,219	
St. Petersburg, FL	FL	Administrative Policy #020400	pol	city	2015	1	29,795	
St. Petersburg, FL	FL	Resolution 2015-40	res	city	2015	1	244,769	
St. Petersburg, FL	FL	Complete Streets Implementation Pl	plan	city	2019	1	244,769	
State of Florida	FL	Florida Statute 335.065 (Bicycle & P	leg	state	1984	1	18,801,310	
Tallahassee, FL	FL	Comprehensive Plan - Mobility Elem	plan	city	2011	1	181,376	
Tampa, FL	FL	Resolution No. 2814	res	city	2012	1	335,709	
Titusville, FL	FL	Resolution No. 15-2011	res	city	2011	1	43,761	
West Melbourne, FL	FL	Horizon 2030 Comprehensive Plan	plan	city	2011	1	18,355	
West Palm Beach, FL	FL	Transportation Element of Comprehe	plan	city	2003	1	99,919	
Winter Haven, FL	FL	Complete Streets Policy	pol	city	2012	1	33,874	
Winter Park, FL	FL	Resolution No. 2083-11	res	city	2011	1	27,852	83





Mature "S" Curve???

OR

LEADING INDICATOR TO POSITIVE CHANGE?

https://visionzeronetwork.org/resources/vision-zero-communities/

FLPRITE Vision Zero Programs

Florida/Puerto Rico **5** Programs
9.4% of all Programs
(6.6% of US Pop.)

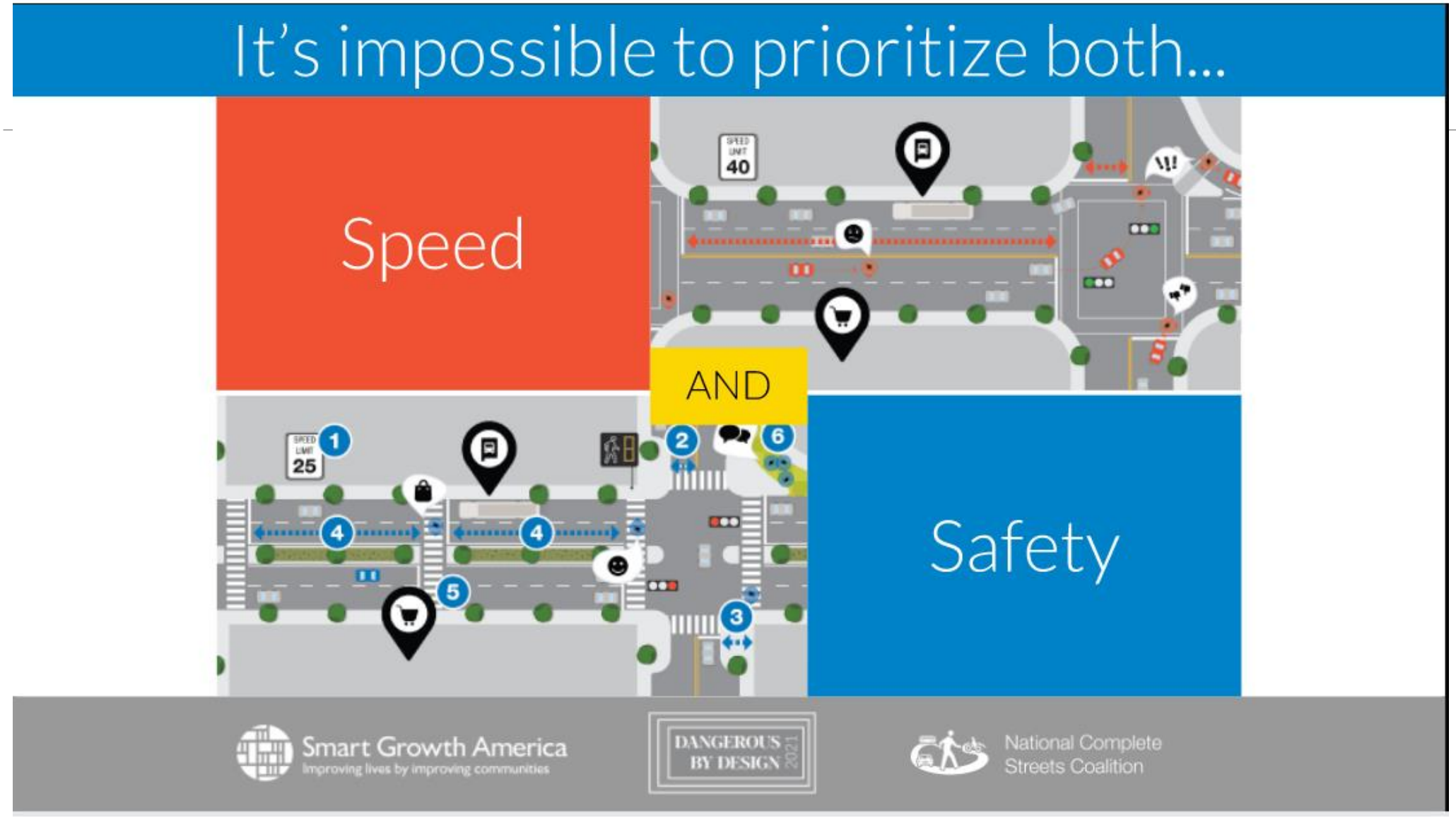
e: August 2022

https://visionzeronetwork.org/resources/vision-zero-communities/

To Complete or Not to Complete?

That is the question!

WHY ARE COMPLETE STREETS IMPORTANT?

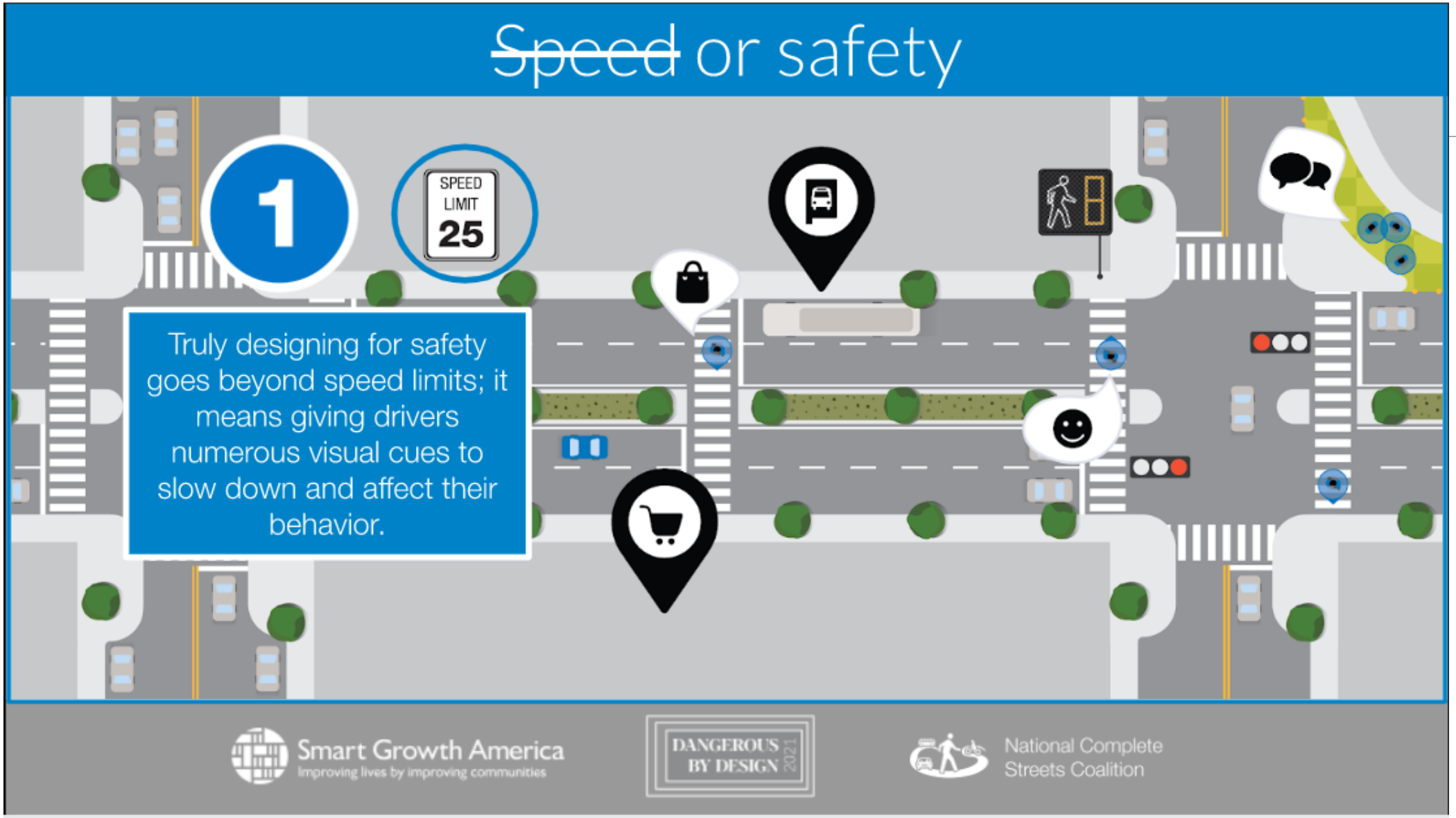


Sources: Dangerous By Design, 2021; National Complete Streets Coalition; Smart Growth America

WHY ARE COMPLETE STREETS IMPORTANT?

Sources: Dangerous By Design, 2021; National Complete Streets Coalition; Smart Growth America

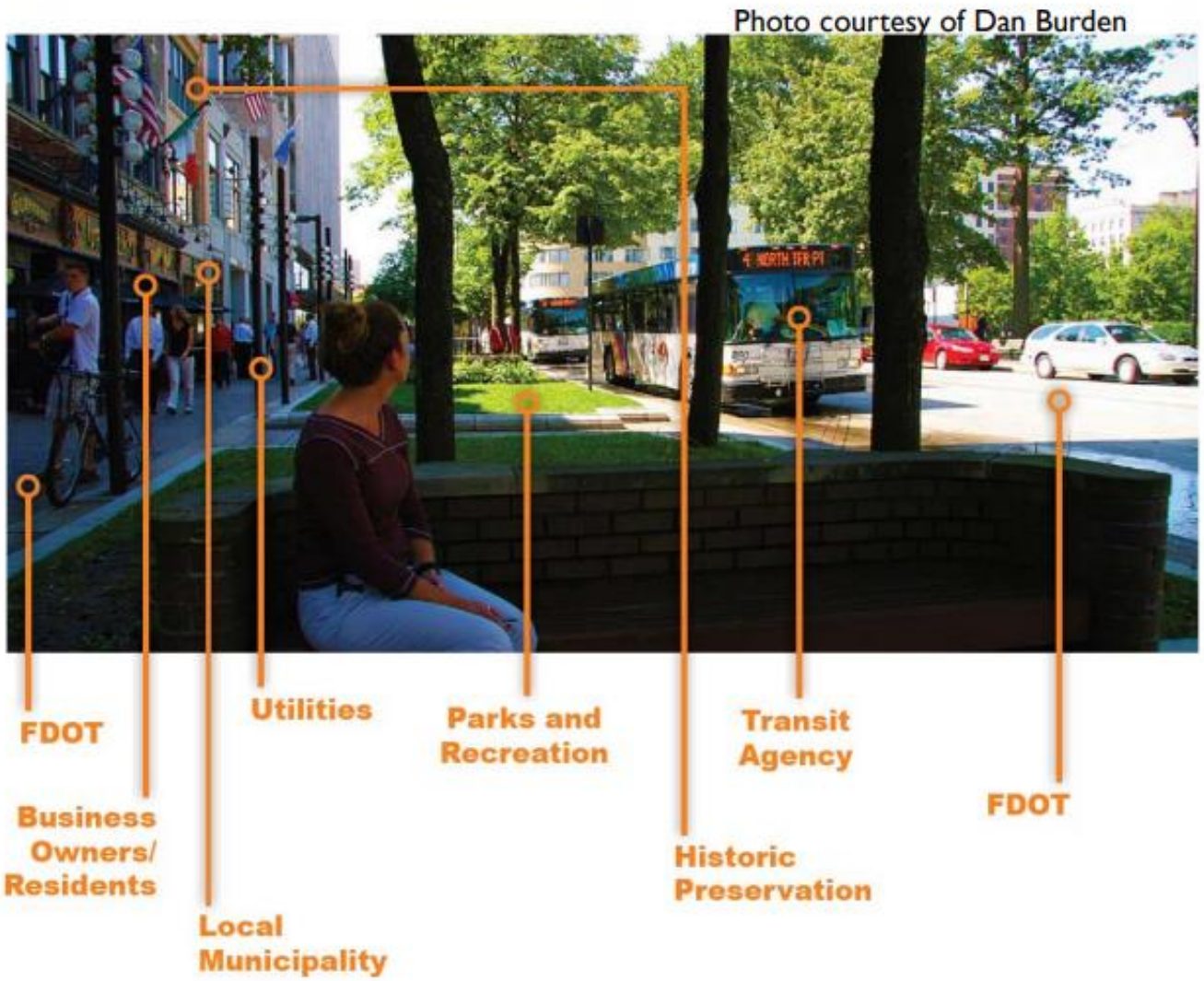
WHY ARE COMPLETE STREETS IMPORTANT?



Sources: Dangerous By Design, 2021; National Complete Streets Coalition; Smart Growth America

WHY ARE COMPLETE STREETS IMPORTANT?

- Increased Safety
- Efficiency
- Promote Livable & Walkable Communities
- Promote economic development
- Context sensitive
- Multiple benefits to multiple users



MULTIPLE BENEFITS

PLACEMAKING

- Unique 'Natural Area' Experience
- Create unique sense of place
- Context driven design

SAFETY

- Passive recreation
- Access to walking and biking trails
- Multi-User and Multi-Generational

ENVIRONMENTAL

- Improved Storm Water Quality + Quantity
- Native Plants
- Pollinator Gardens
- Arboretum + Demonstration Gardens
- Increased Shade/Reduced Heat Island

HEALTH + WELLBEING

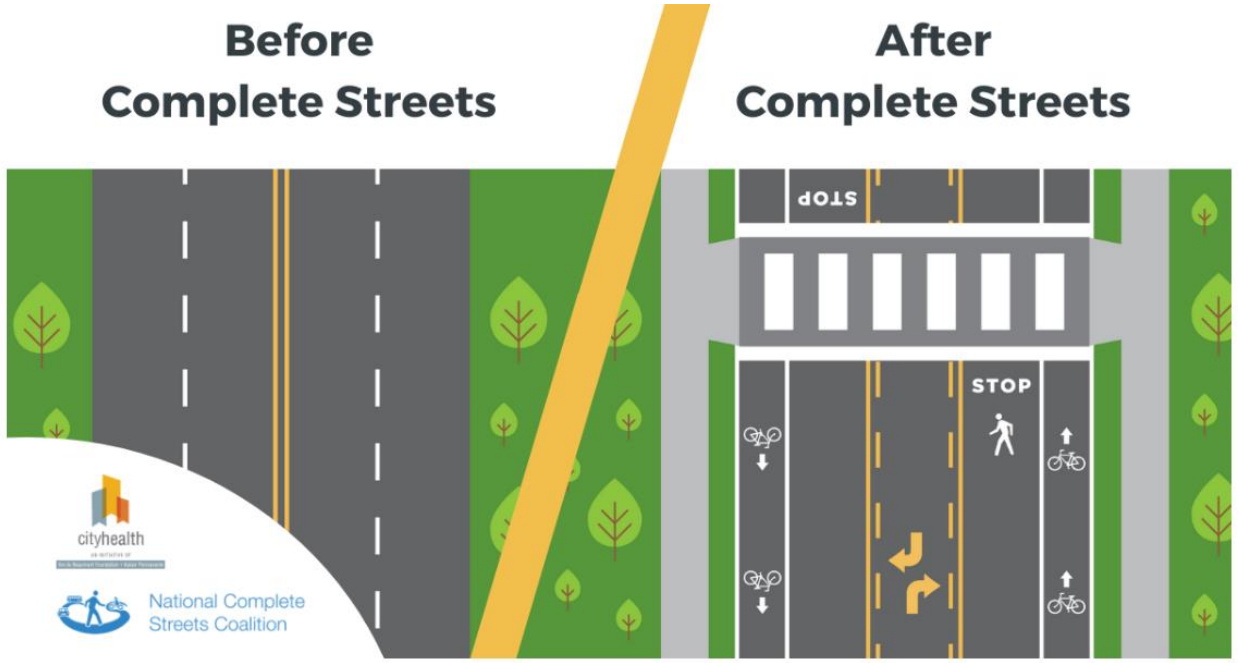
- Traffic Calming + Improved Safety
- Pedestrian/Bike Trail Crossings
- Connectivity

TOOLS & STRATEGIES FOR COMPLETE STREET DESIGN

- Emphasis on Equity
- Collaborative Process and Approach
- Responds to the Community Context

TOOLS & STRATEGIES FOR COMPLETE STREET DESIGN

- Narrower or reduced traffic lanes
- Wider sidewalks
- Separation between bikes/peds and vehicular traffic
- Well-marked crosswalks
- Street trees and plantings
- Other traffic



SR 37 – S. Florida Avenue Lane Repurposing Pilot (aka “Road Diet”)

Dixieland Anniversary celebration 1952 featuring a giant cake that weighed over 5000 pounds

South Florida Avenue Corridor Study
Let's Test the Experts

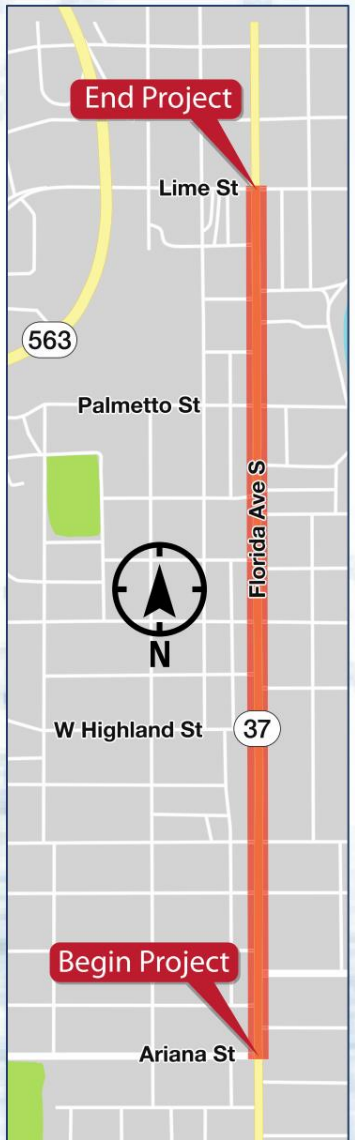
37

Financial Project ID: 444627-1-52-01

April 2020
Polk County

CONSTRUCTION PROJECT

Florida Department of Transportation (FDOT) will begin construction on a pilot project using a new traffic pattern on South Florida Avenue from Ariana Street to Lime Street in downtown Lakeland. The new traffic pattern includes reducing South Florida Avenue from two lanes in each direction to one lane in each direction with a center turn lane. Once in place, the new traffic pattern will be studied for effectiveness over the next year.



PROJECT IMPROVEMENTS

- Remove the top layer of asphalt and repave with new asphalt
- Replace the two narrow lanes in each direction with one wider lane in each direction and maintain the center turn lane
- Provide more room for pedestrians and bicyclists by placing traffic separators between the sidewalk and new travel lanes
- Rebuild the mid-block crossing between Palmetto Street and Hickory Street to match the new roadway
- Upgrade and realign signal equipment

SCHEDULE AND LANE CLOSURES

- Construction begins April 27 and ends in Fall 2020.
- All work is currently scheduled to occur Sunday through Thursday nights from 7 p.m. to 6 a.m.
- Watch for traffic shifts during to construction as crews work on one side of the road, then the other.
- Construction costs are estimated at $950,000.
- Contractor is Hubbard Construction, Inc.

CONTACT US

The Problem

Why the 'road diet' test was approved

1. Driver safety

- Narrow lanes were non-compliant and stressful for drivers
- Cars and trucks speeding
- Several instances of vehicles crashing into buildings
- Too many driveways with vehicles entering traffic
- Identified as a "high-risk" corridor for serious injury

2. Pedestrian safety

- Narrow and uneven sidewalks (tripping hazards)
- Substandard curbs and drainage
- Too few crosswalks
- No pedestrian refuge islands
- One of TPO's top 10 "high-priority bicycle and pedestrian safety corridors"

3. Disability access

- Sidewalks and crossings not ADA compliant

4. Bicyclist safety

- No dedicated road space for cyclists

5. Transit improvements

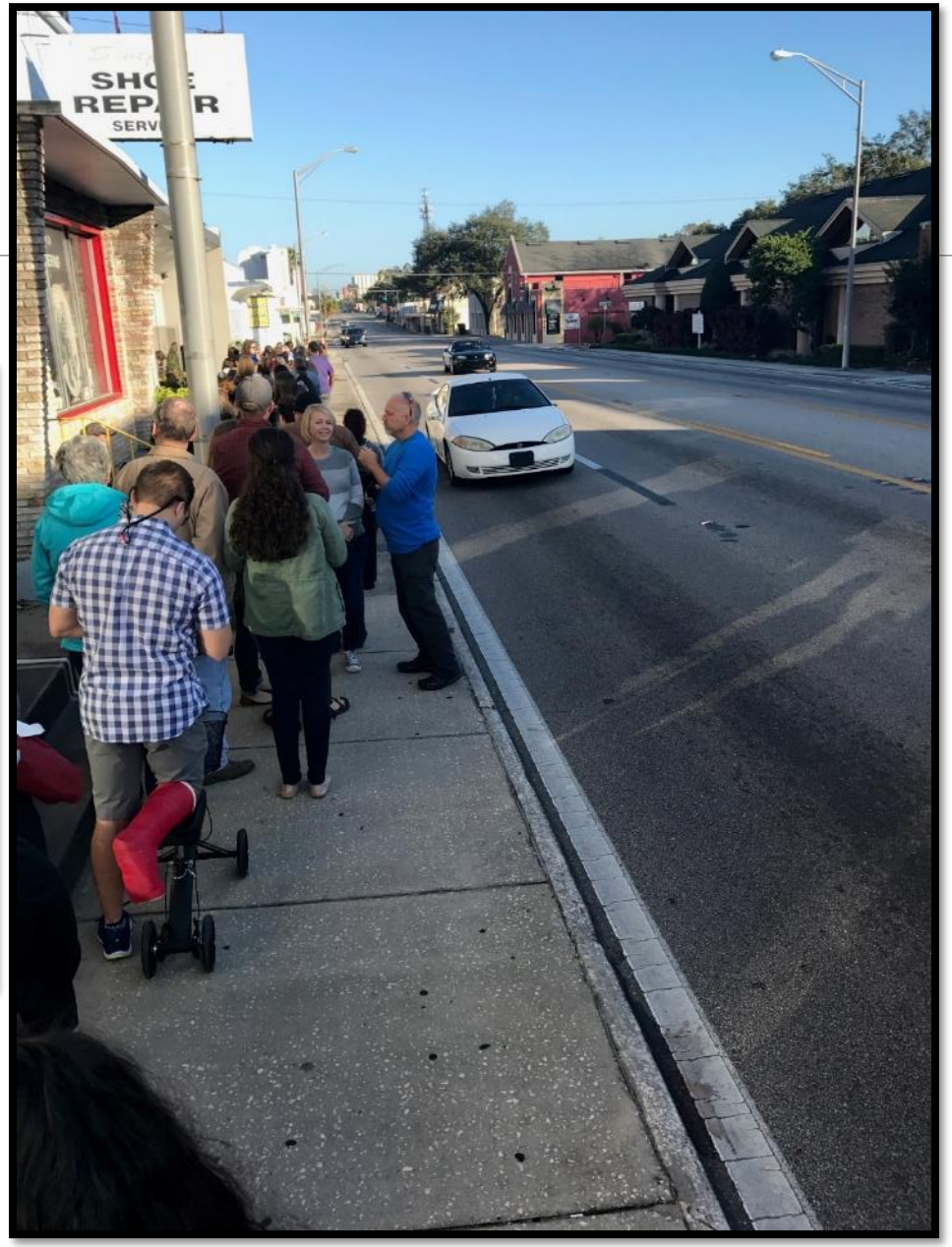
- No dedicated bus lanes or pull-outs
- Few bus shelters

6. Economic development (CRA target area)

- Opportunity to create a culturally and economically vibrant destination
- Opportunity to increase foot traffic and improve access to businesses

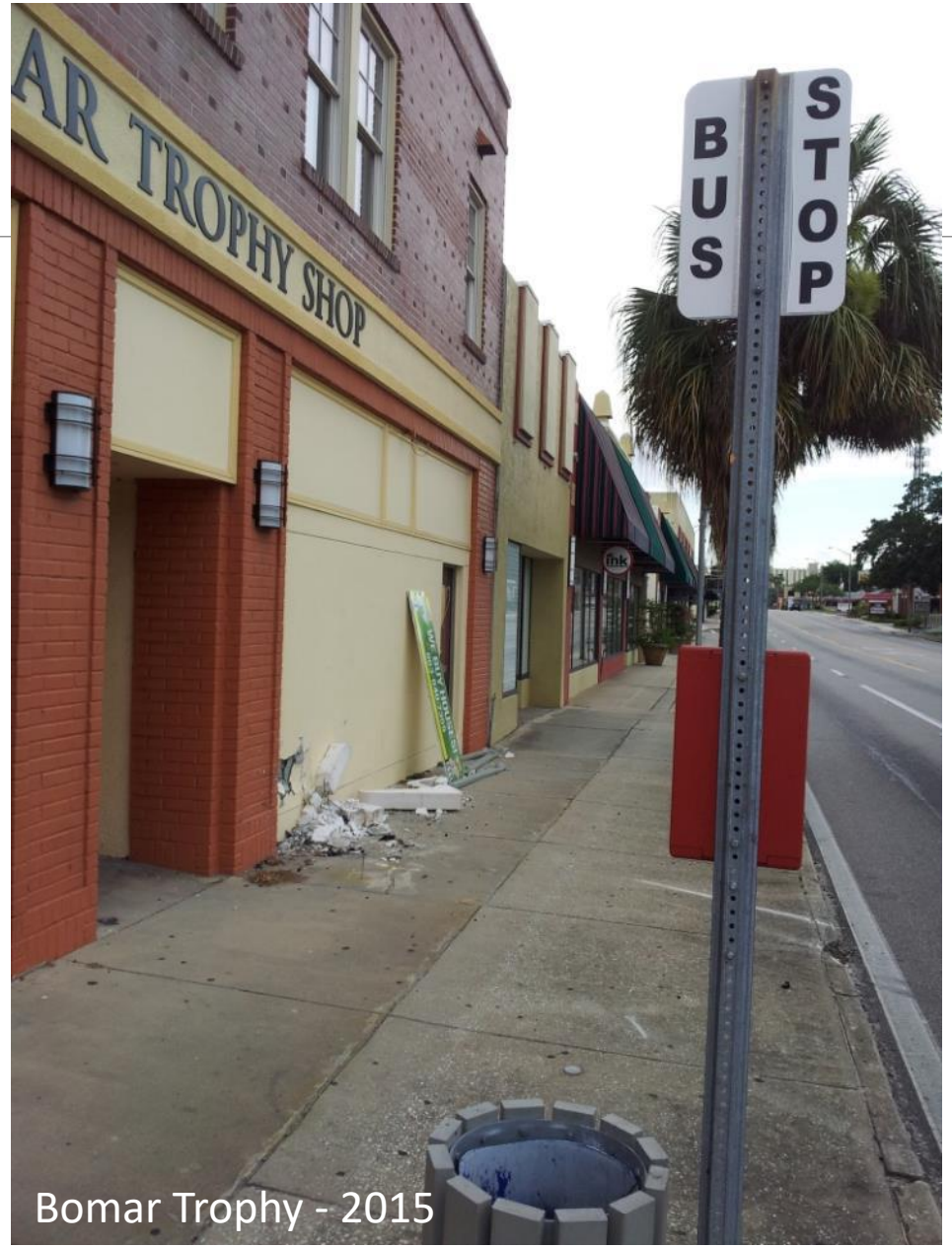
Lakeland | FDOT

Improve safety & economic development



Suntrust - 2016

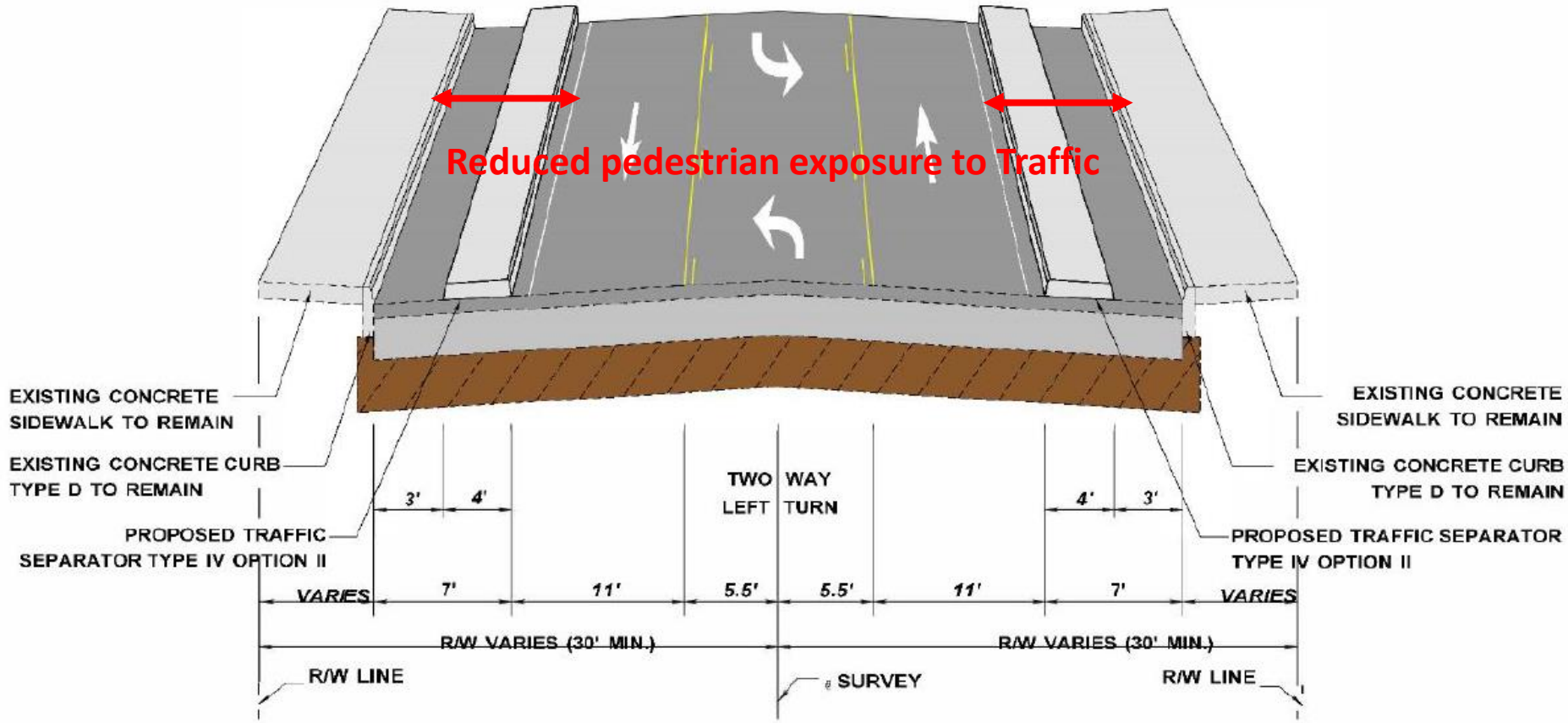
Crash during bollard construction



Bomar Trophy - 2015


Jeep

Road-Diet Test (Pilot)



PROPOSED TYPICAL SECTION SR 37 (FLORIDA AVE.)
LANE ELIMINATION

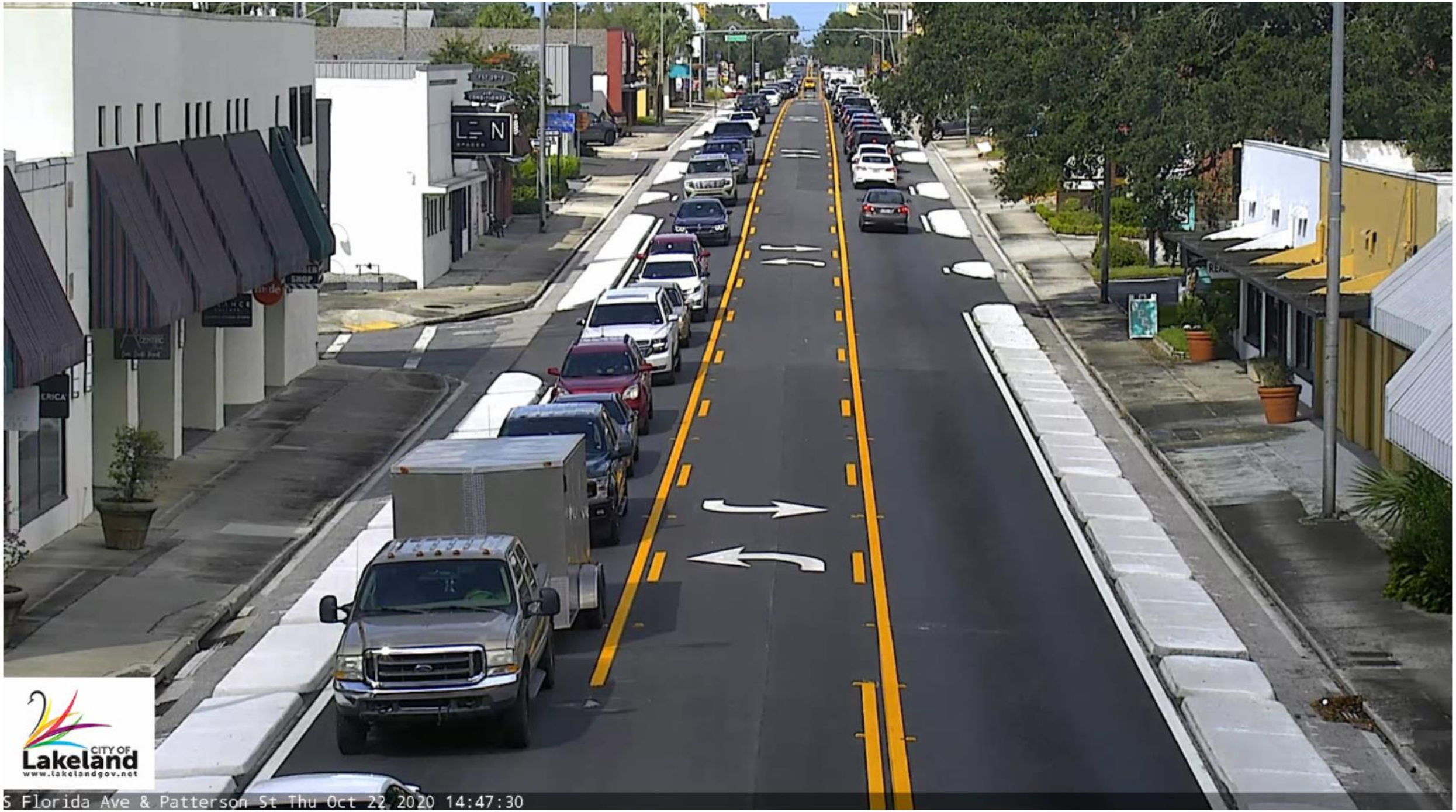
Source: Florida DOT

Road-Diet Test (Pilot)

Source: Florida DOT

Road-Diet Test (Pilot)

Source: Florida DOT


CITY OF
Lakeland
www.lakelandgov.net
S Florida Ave & Patterson St Thu Oct 22 2020 14:47:30

Transit

Changes

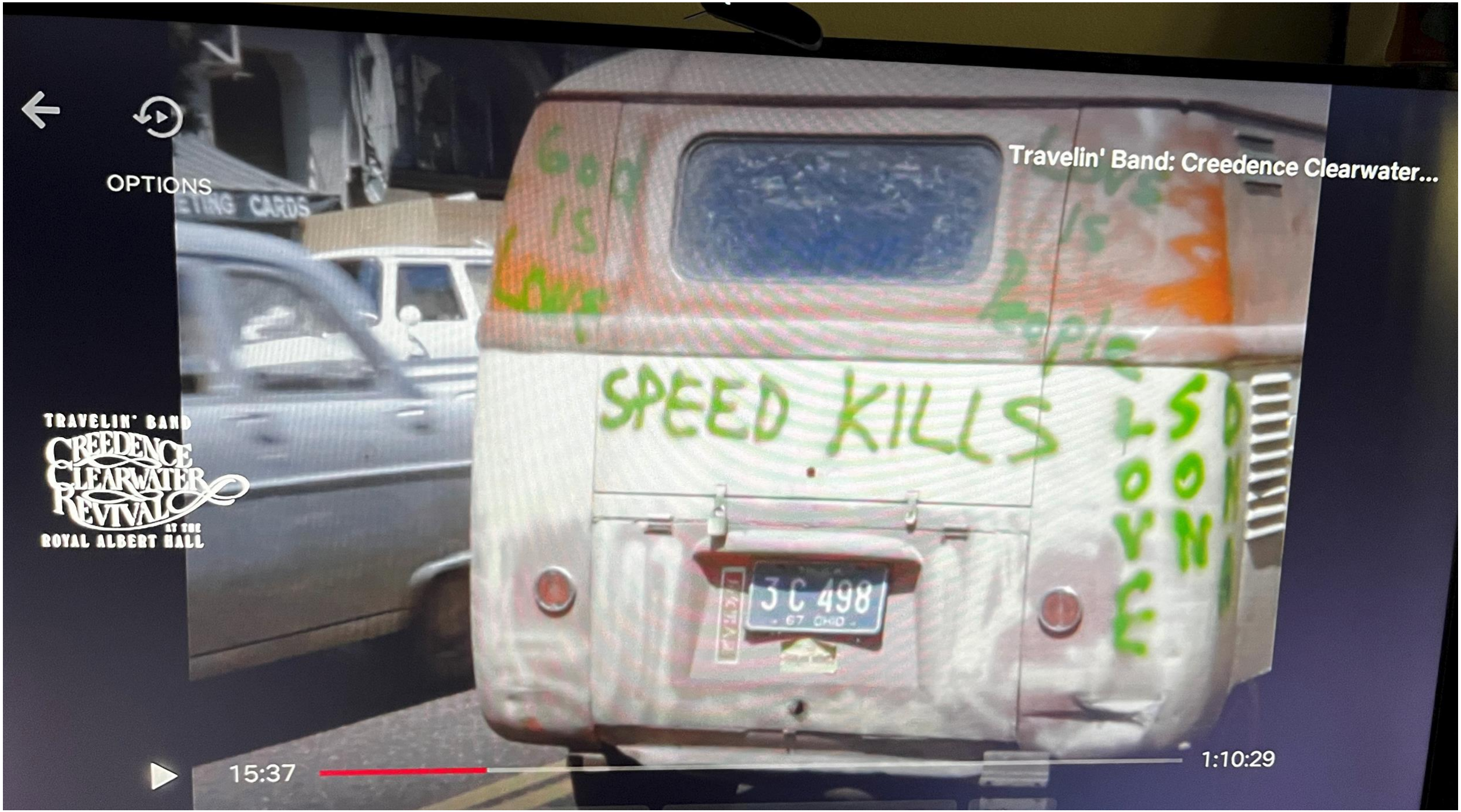
- 8 bus stops were removed in the narrowed section of S. Florida Ave (and 6 more were removed a bit farther south).
- The **Peach Line** was created, using smaller buses to let passengers on and off along a loop of parallel streets in Dixieland and parts of downtown.

Factors affecting bus stop placement

- Loading or unloading takes an average of **45 seconds** for ambulatory passengers and **2½ to 4 minutes** for riders who use wheelchair lifts.
- Gold Line buses are **40 feet** long.
- Bus pull-outs would need to be at least **90 feet** long and located immediately after intersections so transit drivers could merge back onto the road after signal changes.
- Returning bus stops to the study area would affect traffic.

Ridership statistics

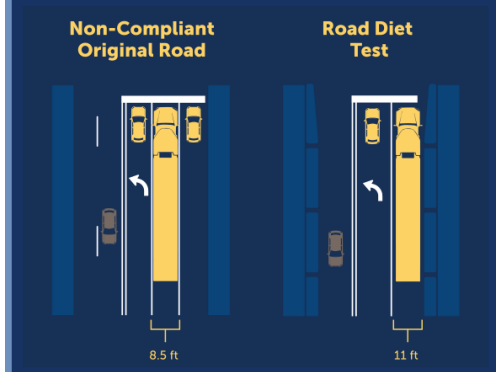
- The Peach Line serves between **1,200 and 1,500 riders** a month
- Prior to lane realignment, buses picked up or dropped off an average of **12 wheelchair users** in the study area each day.


OPTIONS
Travelin' Band: Creedence Clearwater...
TRAVELIN' BAND
CREEDENCE CLEARWATER REVIVAL
AT THE ROYAL ALBERT HALL
SPEED KILLS
15:37
1:10:29

Driver safety

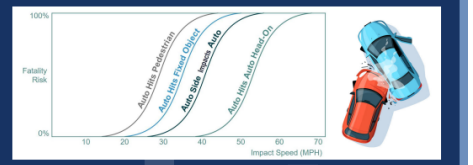
Lane width

- The old, non-compliant lanes on S. Florida Avenue were only 8.5 feet wide – exactly the same width as a typical tractor-trailer.
- As part of the road diet test, lanes were **widened by almost 30%** to the state recommended **11 feet**.



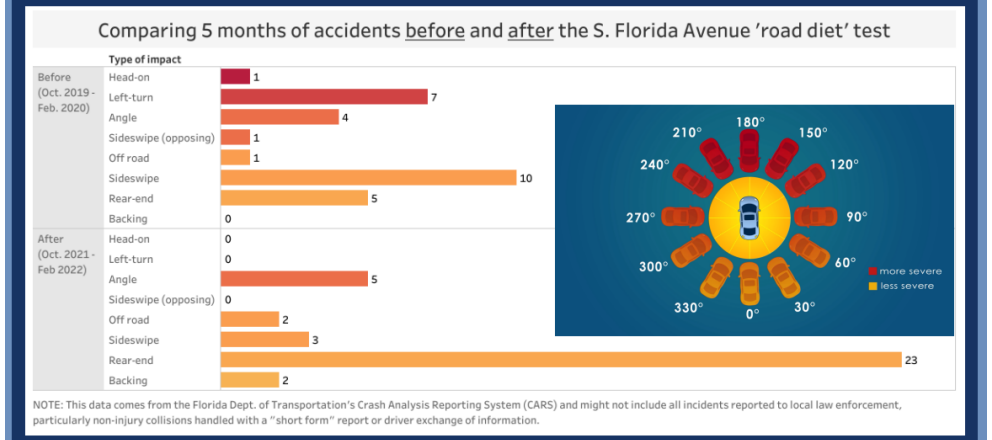
Speed

- The average driving speed has decreased from **33 to 30 mph** (the posted limit).
- The upper range of speed (85th percentile) has dropped from **38 to 35 mph**.
- Risk of death from all types of accidents nearly doubles between 30 and 40 mph.



Crashes

- The number of crashes **before** and **after** lane realignment is **comparable**.
- The angles of impact have been **less severe** with fewer head-on, left-turn and sideswipe crashes, but more rear-end collisions.



NOTE: This data comes from the Florida Dept. of Transportation's Crash Analysis Reporting System (CARS) and might not include all incidents reported to local law enforcement, particularly non-injury collisions handled with a "short form" report or driver exchange of information.

FDOT

Table 9
S.R. 37 – Crash Types

Crash Type	Oct '15 to Dec '15	2016	2017	2018	2019	Jan to Sept '20	Oct '20 to Feb '21	TOTAL
Angle	2	7	15	11	10	5	1	**51**
Backed-Into	0	0	0	2	0	0	0	**2**
Bicycle	1	3	0	0	1	1	0	**6**
Fixed-Object	1	2	7	7	5	6	0	**28**
Head-On	0	2	0	0	2	0	1	**5**
Left-Turn	1	9	7	13	12	3	2	**47**
Pedestrian	0	0	1	1	2	0	0	**4**
Rear-End	6	5	10	13	18	29	43	**124**
Right-Turn	1	2	5	5	1	2	1	**17**
Side-Swipe	1	15	18	17	18	8	1	**78**
Total	**13**	**45**	**63**	**69**	**69**	**54**	**49**	**362**

“Abbey Road” Album Cover August 8, 1969

https://twitter.com/i/status/1618262643873021952

“If These Walls Could Sing”, a new documentary charting the importance of Abbey Road Studios

Is anyone safe??

“If These Walls Could Sing”, a new documentary charting the importance of Abbey Road Studios

What happens if the outside travel-lanes are removed?

2,000 to 5,000
less vehicles per day

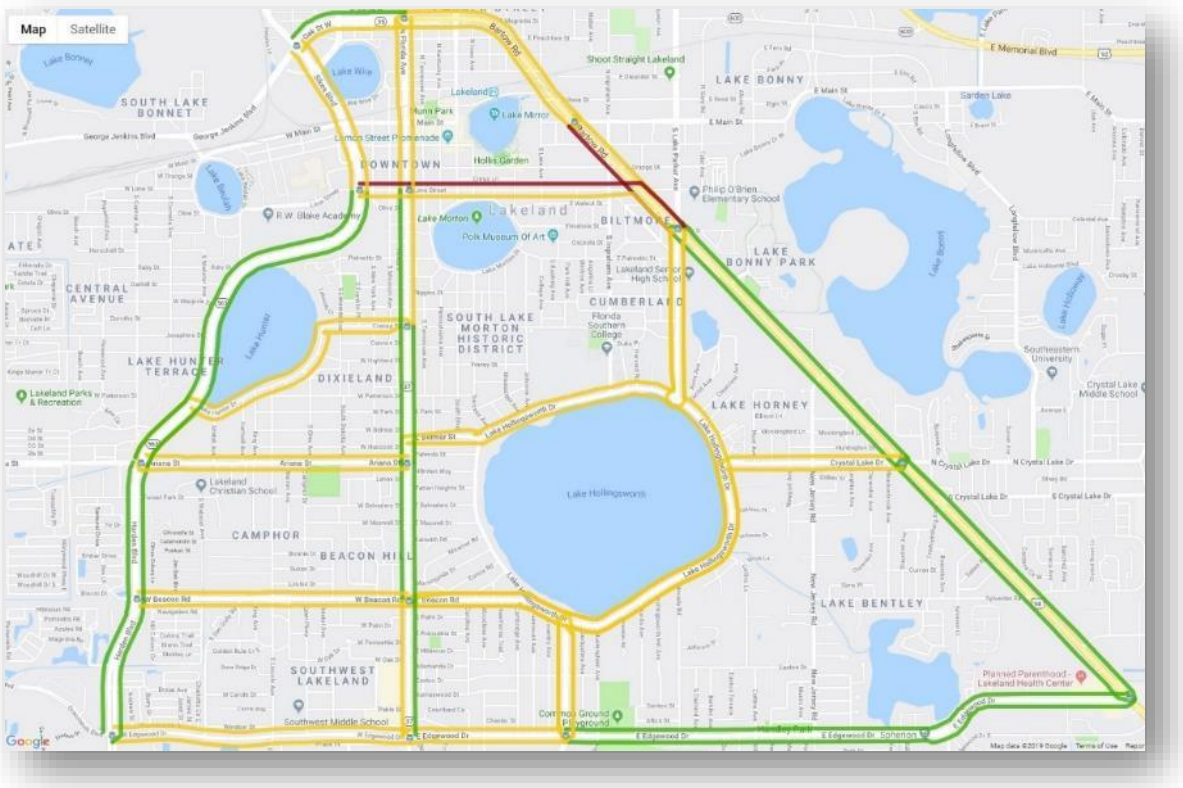
30%
less crashes

Estimated
17 to 50 second delay
in peak hours

- ✓ 2,000 to 5,000 vehicle trips per day are diverted from South Florida Avenue to other roadways including Sikes Blvd., Missouri and New York Ave., and Massachusetts Ave.
- ✓ Estimates suggests up to 30% annual reduction of traffic crashes.
- ✓ The estimated average travel time increase is 31 to 39 seconds in morning peak hour and travel time increase of 17 to 50 seconds in the afternoon peak hour.

Data Collection

- FDOT to collect pre-data at approx. 90 locations in study area (tube and TMCs)
- City purchased and installed bluetoads at 16 locations – already reporting
- Post data collection and analysis
- Data from other studies

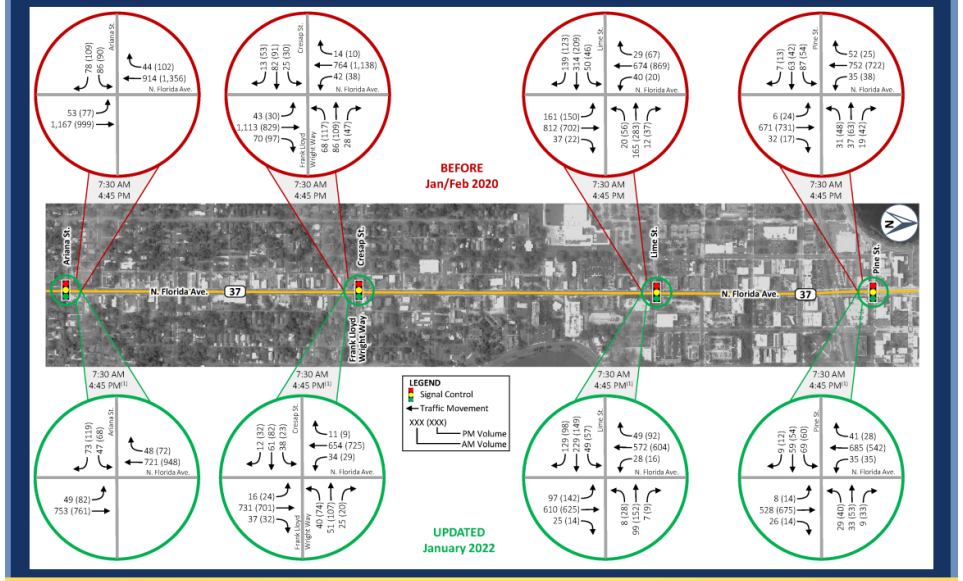


Traffic diversion

- Overall traffic volume in the study area has decreased by an average of **14.7%**.
- Traffic analysis suggests **5-10% diversion** to parallel roads including Sikes Blvd.

	Northbound/Southbound			Eastbound/Westbound		
Intersection	**2020 "Before"**	**2022 "After"**	**% change**	**2020 "Before"**	**2022 "After"**	**% change**
Ariana Street	17,084	14,590	-17.1%	1,335	1,308	-2.1%
FLW Way	15,402	12,686	-21.4%	2,536	2,248	-12.8%
Lime Street	13,195	11,741	-12.4%	5,065	3,930	-28.9%
Pine Street	11,562	10,707	-8.0%	1,937	1,746	-10.9%
Average			**-14.7%**			**-13.7%**

- Northbound vehicles turning left on Ariana Street rose from 499 in 2020 to 527 in 2022 (from **5.7%** to **8.0% of northbound drivers** during peak times).
- Southbound vehicles turning right on Lime Street rose from 378 in 2020 to 543 in 2022 (from **5.5%** to **10.3% of southbound drivers** during peak times).



Lakeland FDOT

Travel Time results – It's About reliability!!

Travel times

City of Lakeland Traffic Management Center

The one-mile section of S. Florida Avenue between Ariana St. and Lime St. has been monitored by more than **90 sensors and dozens of cameras** since before the pilot project began.

Average travel time during the **morning rush hour** is virtually **unchanged**.

Feb. 2020 Average weekday AM peak travel time		Feb – Apr 2022 Average weekday AM peak travel time	
Northbound	Southbound	Northbound	Southbound
3 minutes, 0 seconds	2 minutes, 56 seconds	3 minutes, 1 second	2 minutes, 52 seconds

Average travel time during the **afternoon rush hour** has increased, but only by **14 seconds** northbound and **72 seconds** southbound.

Feb. 2020 Average weekday PM peak travel time		Feb – Apr 2022 Average weekday PM peak travel time	
Northbound	Southbound	Northbound	Southbound
3 minutes, 17 seconds	3 minutes, 4 seconds	3 minutes, 31 seconds	4 minutes, 16 seconds

Q: "Averages don't reveal the full range of experiences. What about the unlucky commuters at the highest end of the travel times?"

A: In addition to averages, traffic technicians have looked at the **95th percentile** of travel times. The worst-case scenario, if you're traveling northbound in the afternoon rush hour, is actually **15 seconds faster** than before the road diet.

However, if you're traveling southbound, unlucky commuters who hit every stoplight could need 6 minutes and 10 seconds to get through the corridor, which is **2 minutes and 25 seconds slower** than before the road diet.

Feb. 2020 *95th percentile* of commuters, Weekday PM peak travel time		Feb – Apr 2022 *95th percentile* of commuters, Weekday PM peak travel time	
Northbound	Southbound	Northbound	Southbound
4 minutes, 23 seconds	3 minutes, 45 seconds	4 minutes, 8 seconds	6 minutes, 10 seconds

Lakeland | FDOT

Feb. 2020 Average weekday AM peak travel time	
Northbound	Southbound
3 minutes, 0 seconds	2 minutes, 56 seconds

Feb – Apr 2022 Average weekday AM peak travel time	
Northbound	Southbound
3 minutes, 1 second	2 minutes, 52 seconds

verage travel time during the **afternoon rush hour** has increased, b
only by **14 seconds** northbound and **72 seconds** southbound.

Feb. 2020 Average weekday PM peak travel time	
Northbound	Southbound
3 minutes, 17 seconds	3 minutes, 4 seconds

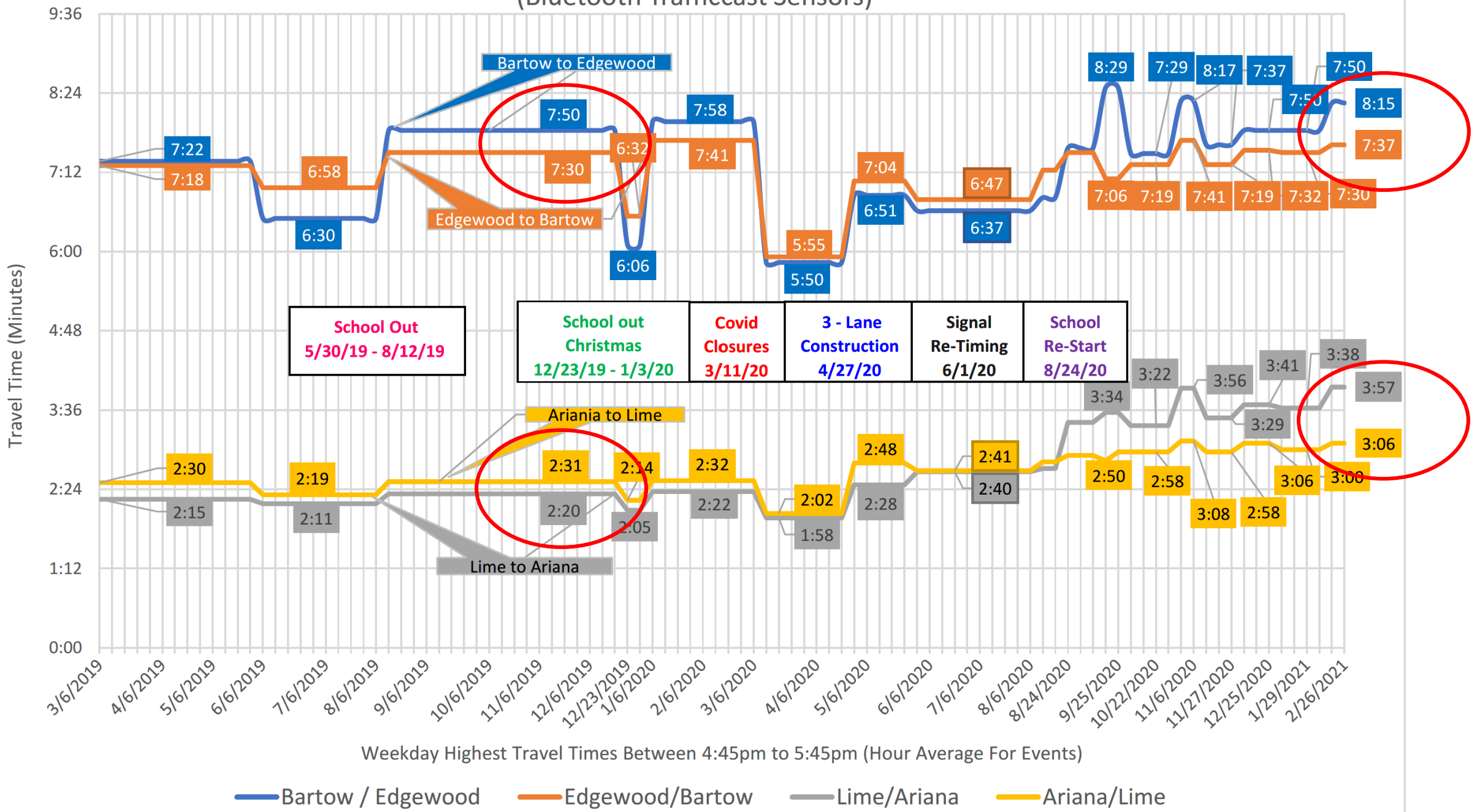
Feb – Apr 2022 Average weekday PM peak travel time	
Northbound	Southbound
3 minutes, 31 seconds	4 minutes, 16 seconds

Estimated
17 to 50 second delay
in peak hours

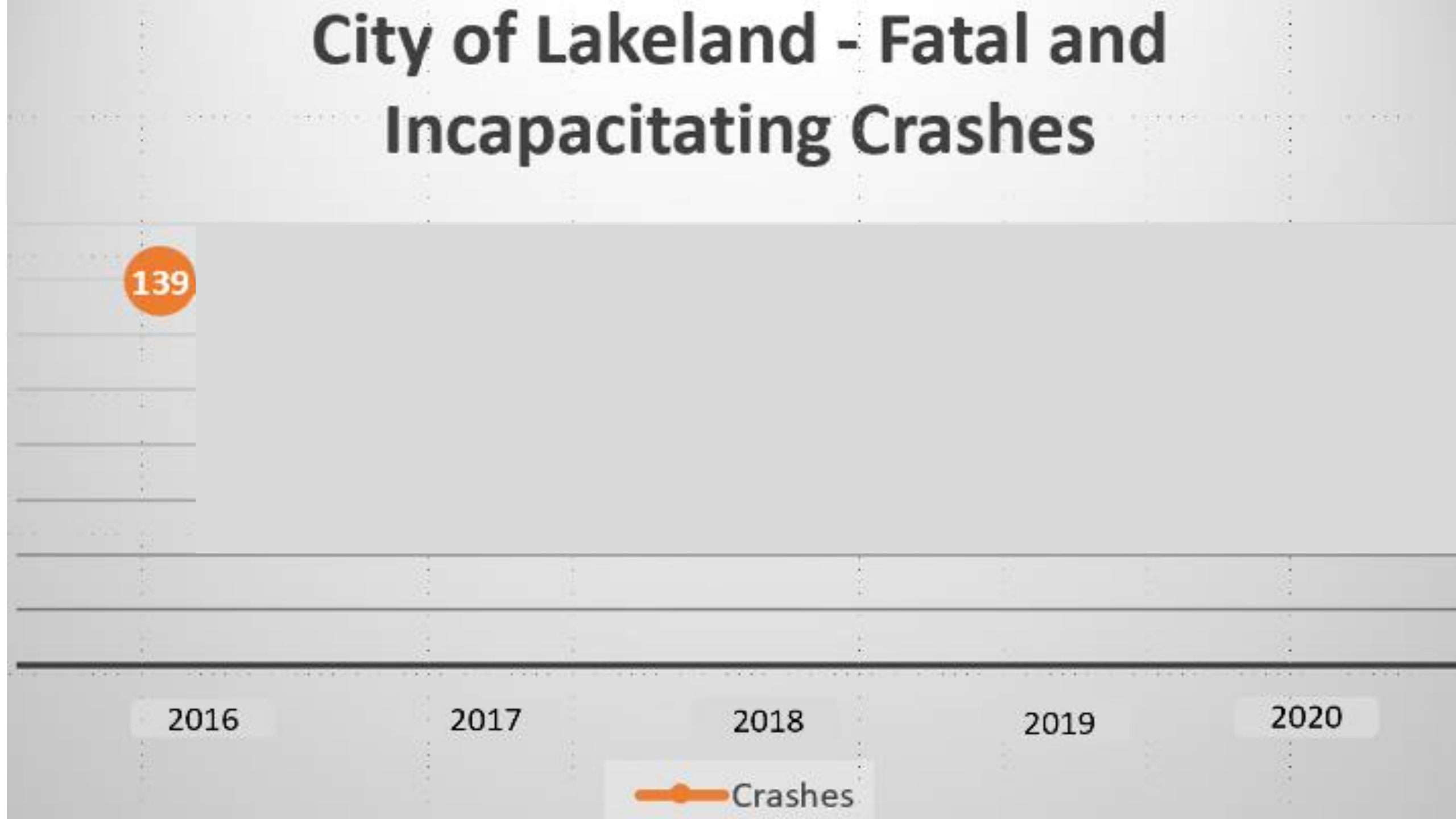
However, if you're traveling southbound, unlucky commuters who hit every stoplight could need 6 minutes and 10 seconds to get through the corridor, which is **2 minutes and 25 seconds slower** than before the road diet.

Feb. 2020 *95th percentile* of commuters, Weekday PM peak travel time	
Northbound	Southbound
4 minutes, 23 seconds	3 minutes, 45 seconds

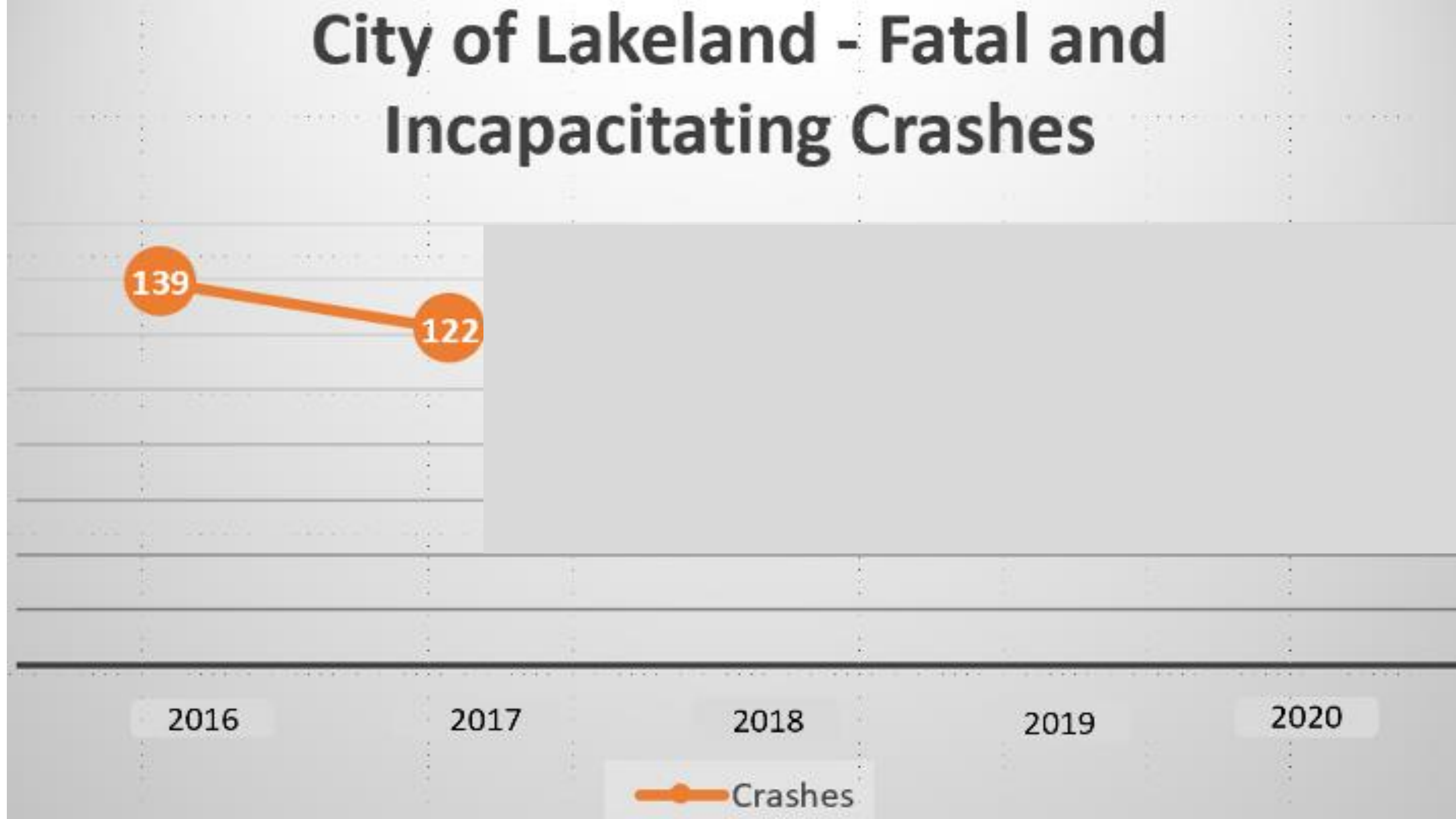
Feb – Apr 2022 *95th percentile* of commuters, Weekday PM peak travel time	
Northbound	Southbound
4 minutes, 8 seconds	6 minutes, 10 seconds


S. Florida Avenue Average TRAVEL TIMES Peak Hour (4:45pm - 5:45pm)
(Bluetooth Trafficcast Sensors)
Travel Time (Minutes)
9:36
8:24
7:12
6:00
4:48
3:36
2:24
1:12
0:00
Bartow to Edgewood
Edgewood to Bartow
Ariania to Lime
Lime to Ariana
7:22
7:18
6:58
6:30
7:50
7:30
6:32
6:06
7:58
7:41
5:55
5:50
7:04
6:51
6:47
6:37
8:29
7:06
7:29
7:19
8:17
7:41
7:37
7:19
7:50
7:32
7:50
7:30
8:15
7:37
2:30
2:15
2:19
2:11
2:31
2:20
2:14
2:05
2:32
2:22
2:02
1:58
2:48
2:28
2:41
2:40
3:34
2:50
3:22
2:58
3:56
3:08
3:41
2:58
3:38
3:06
3:29
3:06
3:57
3:00
School Out
5/30/19 - 8/12/19
School out
Christmas
12/23/19 - 1/3/20
Covid
Closures
3/11/20
3 - Lane
Construction
4/27/20
Signal
Re-Timing
6/1/20
School
Re-Start
8/24/20
3/6/2019
4/6/2019
5/6/2019
6/6/2019
7/6/2019
8/6/2019
9/6/2019
10/6/2019
11/6/2019
12/6/2019
12/23/2019
1/6/2020
2/6/2020
3/6/2020
4/6/2020
5/6/2020
6/6/2020
7/6/2020
8/6/2020
8/24/2020
9/25/2020
10/22/2020
11/6/2020
11/27/2020
12/25/2020
1/29/2021
2/26/2021
Weekday Highest Travel Times Between 4:45pm to 5:45pm (Hour Average For Events)
Bartow / Edgewood
Edgewood/Bartow
Lime/Ariana
Ariana/Lime

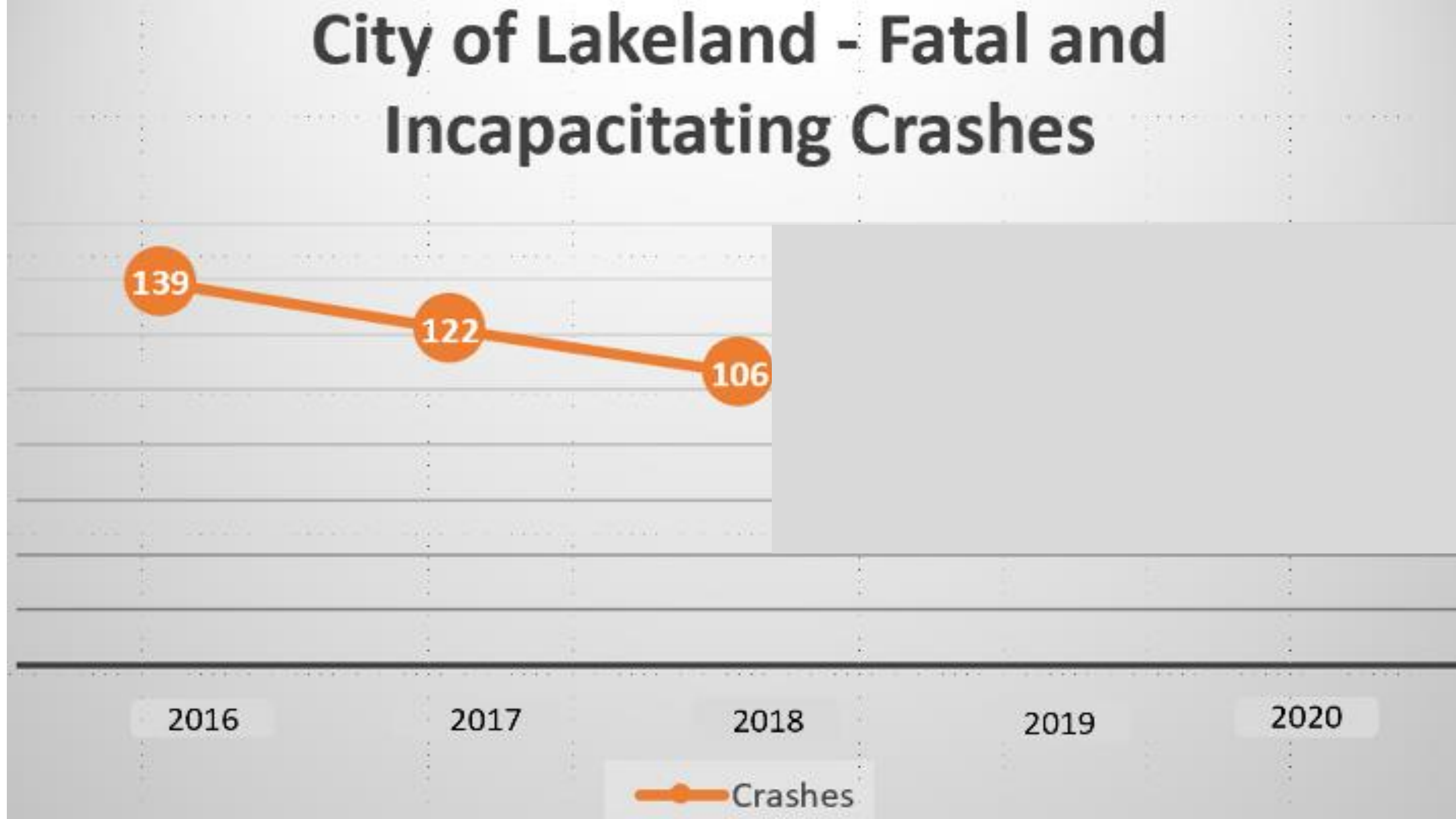
City of Lakeland - Fatal and Incapacitating Crashes



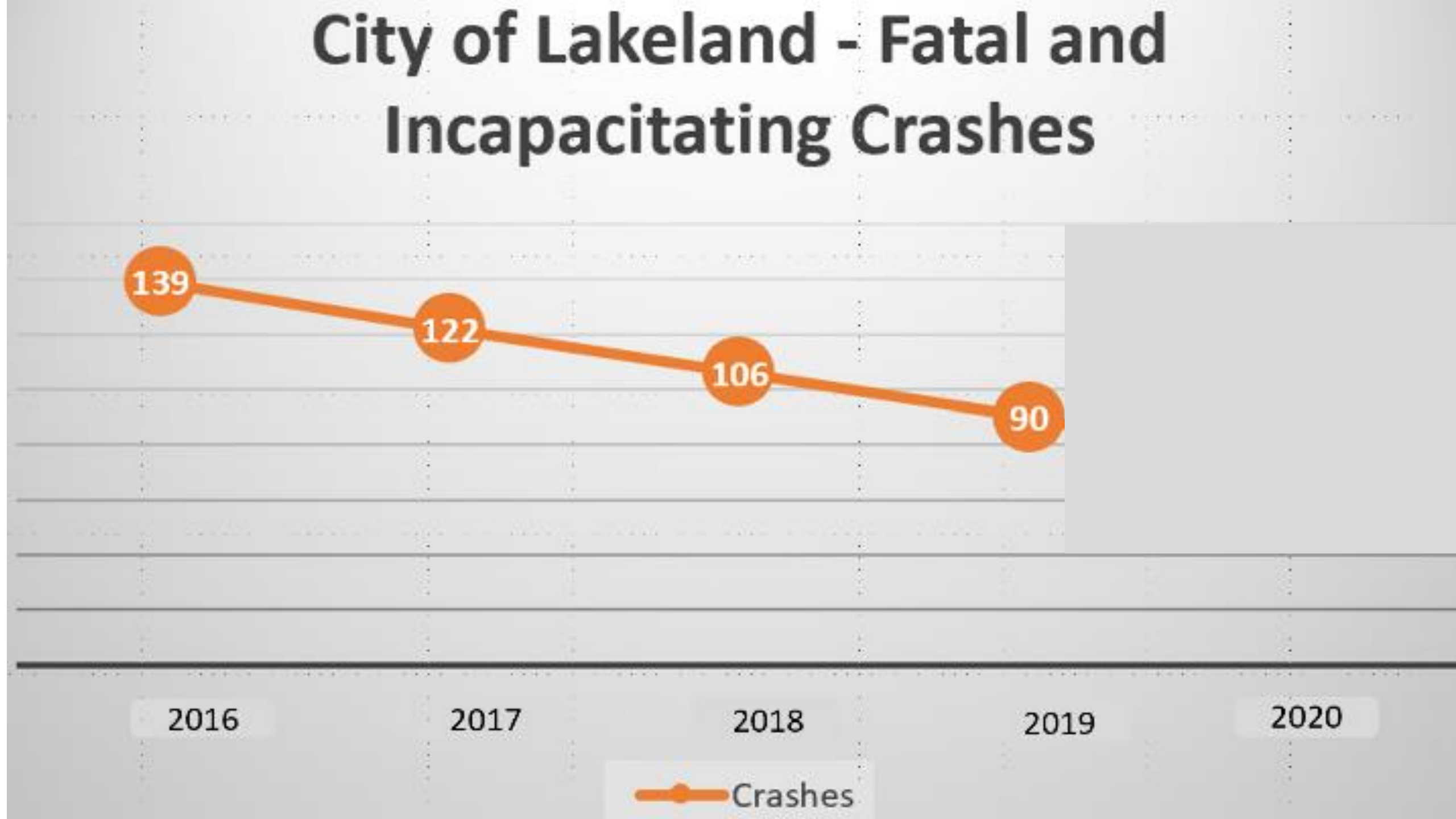
City of Lakeland - Fatal and Incapacitating Crashes



City of Lakeland - Fatal and Incapacitating Crashes



City of Lakeland - Fatal and Incapacitating Crashes



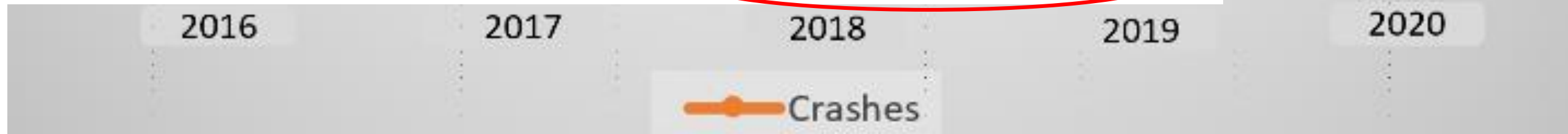
City of Lakeland - Fatal and Incapacitating Crashes

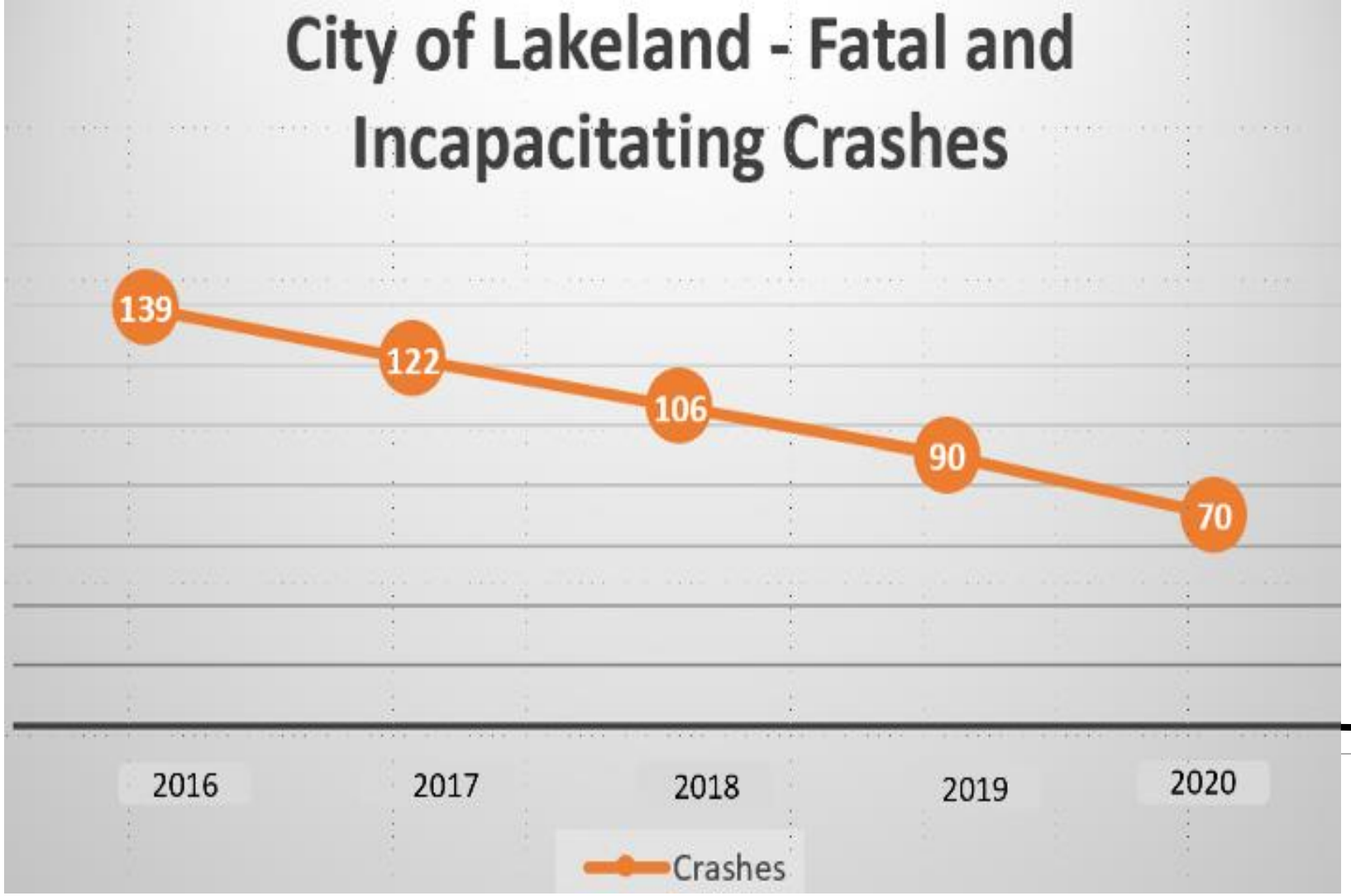
	Hartford, CT			
16	Baton Rouge, LA	157.9	164.7	6.8
70	Dayton, OH	42.4	49.2	6.8
92	Colorado Springs, CO	23.5	29.7	6.2
78	New Haven-Milford, CT	38.1	44.3	6.2
66	Akron, OH	44.4	50.6	6.2
44	Indianapolis-Carmel-Anderson, IN	91.3	97.3	6.0
55	San Diego-Carlsbad, CA	64.5	70.3	5.9
73	Harrisburg-Carlisle, PA	41.7	46.6	4.9
71	Cincinnati, OH-KY-IN	42.9	47.5	4.6
83	Chicago-Naperville-Elgin, IL-IN-WI	34.5	39.0	4.5
86	Urban Honolulu, HI	30.6	34.9	4.3
52	Salt Lake City, UT	70.5	74.7	4.2
65	Toledo, OH	49.6	53.8	4.1
57	Denver-Aurora-Lakewood, CO	58.2	62.5	4.1
67	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	46.8	50.6	3.8
84	Albany-Schenectady-Troy, NY	34.6	38.2	3.6
82	Cleveland-Elyria, OH	35.9	39.1	3.1
64	Grand Rapids-Wyoming, MI	51.4	54.3	2.9
46	Austin-Round Rock, TX	91.8	94.4	2.7
17	Birmingham-Hoover, AL	157.0	159.1	2.1
96	Springfield, MA	24.7	26.7	2.1
62	Columbus, OH	53.8	55.7	1.9

2021 Dangerous By Design Report

81	Washington-Arlington-Alexandria, DC-VA-MD-WV	39.7	40.3	0.6
76	Des Moines-West Des Moines, IA	44.4	45.0	0.6
50	San Jose-Sunnyvale-Santa Clara, CA	80.6	81.0	0.4
95	Seattle-Tacoma-Bellevue, WA	26.5	26.9	0.4
87	Providence-Warwick, RI-MA	33.6	33.8	0.2
77	Buffalo-Cheektowaga-Niagara Falls, NY	44.2	44.4	0.2
88	Worcester, MA-CT	33.3	33.3	0.0
3	Oklahoma City, OK	110.7	110.6	-0.1
80	Virginia Beach-Norfolk-Newport News, VA-NC	41.3	41.2	-0.1
99	Madison, WI	18.0	17.4	-0.6
97	Boston-Cambridge-Newton, MA-NH	19.6	19.0	-0.6
90	San Francisco-Oakland-Hayward, CA	33.5	32.4	-1.1
48	New Orleans-Metairie, LA	89.6	87.9	-1.7
43	Knoxville, TN	102.5	100.0	-2.5
100	Provo-Orem, UT	17.3	14.8	-2.6
5	Deltona-Daytona Beach-Ormond Beach, FL	265.4	260.0	-5.4
33	Detroit-Warren-Dearborn, MI	135.4	127.9	-7.5
56	Wichita, KS	70.7	62.9	-7.7
9	Lakeland-Winter Haven, FL	230.9	214.6	-16.4

50% reduction





2021 2022 2023 2024

City of Lakeland - Fatal and Incapacitating Crashes

2021 Dangerous By Design: Lakeland

Metropolitan statistical area	*Dangerous by Design 2019* PDI	*Dangerous by Design 2021* PDI	Change in PDI, DBD 2019 to DBD 2021 *(largest to smallest change)*
Portland-Vancouver-Hillsboro, OR-WA	35.9	43.3	7.5
Rochester, NY	29.1	36.1	7.0
Hartford-West Hartford-East Hartford, CT	50.0	57.0	7.0
Baton Rouge, LA	157.9	164.7	6.8
Dayton, OH	42.4	49.2	6.8
Colorado Springs, CO	23.5	29.7	6.2
New Haven-Milford, CT	38.1	44.3	6.2
Akron, OH	44.4	50.6	6.2
Indianapolis-Carmel-Anderson, IN	91.3	97.3	6.0
San Diego-Carlsbad, CA	64.5	70.3	5.9
Harrisburg-Carlisle, PA	41.7	46.6	4.9
Cincinnati, OH-KY-IN	42.9	47.5	4.6
Chicago-Naperville-Elgin, IL-IN-WI	34.5	39.0	4.5
Urban Honolulu, HI	30.6	34.9	4.3
Salt Lake City, UT	70.5	74.7	4.2
Toledo, OH	49.6	53.8	4.2
Denver-Aurora-Lakewood, CO	58.2	62.3	4.1
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	46.8	50.6	3.8
Albany-Schenectady-Troy, NY	34.6	38.2	3.6
Cleveland-Elyria, OH	35.9	39.1	3.1
Grand Rapids-Wyoming, MI	51.4	54.3	2.9
Austin-Round Rock, TX	91.8	94.4	2.7
Birmingham-Hoover, AL	157.0	159.1	2.1
Springfield, MA	24.7	26.7	2.1
Columbus, OH	53.8	55.7	1.9
75	Allentown-Bethlehem-Easton, PA-NJ	43.9	45.4	1.5
91	Minneapolis-St. Paul-Bloomington, MN-WI	30.9	32.3	1.4
93	New York-Newark-Jersey City, NY-NJ-PA	27.1	28.3	1.1
27	McAllen-Edinburg-Mission, TX	140.8	141.8	1.0
29	Augusta-Richmond County, GA-SC	134.4	135.3	1.0
94	Pittsburgh, PA	27.3	28.2	0.9
81	Washington-Arlington-Alexandria, DC-VA-MD-WV	39.7	40.3	0.6
76	Des Moines-West Des Moines, IA	44.4	45.0	0.6
50	San Jose-Sunnyvale-Santa Clara, CA	80.6	81.0	0.4
95	Seattle-Tacoma-Bellevue, WA	26.5	26.9	0.4
87	Providence-Warwick, RI-MA	33.6	33.8	0.2
77	Buffalo-Cheektowaga-Niagara Falls, NY	44.2	44.4	0.2
88	Worcester, MA-CT	33.3	33.3	0.0
39	Oklahoma City, OK	110.7	110.6	-0.1
80	Virginia Beach-Norfolk-Newport News, VA-NC	41.3	41.2	-0.1
99	Madison, WI	18.0	17.4	-0.6
97	Boston-Cambridge-Newton, MA-NH	19.6	19.0	-0.6
90	San Francisco-Oakland-Hayward, CA	33.5	32.4	-1.1
48	New Orleans-Metairie, LA	89.6	87.9	-1.7
43	Knoxville, TN	102.5	100.0	-2.5
100	Provo-Orem, UT	17.3	14.8	-2.6
5	Deltona-Daytona Beach-Ormond Beach, FL	265.4	260.0	-5.4
33	Detroit-Warren-Dearborn, MI	135.4	127.9	-7.5
56	Wichita, KS	70.7	62.9	-7.7
9	Lakeland-Winter Haven, FL	230.9	214.6	-16.4

ZERO??

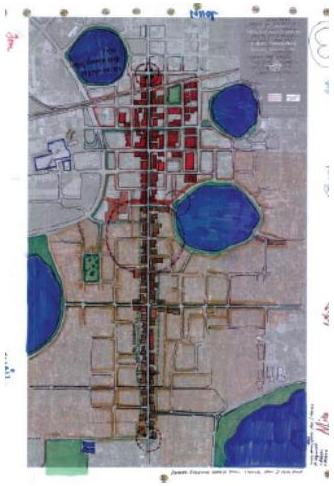
OH, YEAH BABY!!

2021 2022 2023 2024

“Complete Streets” Public Design Charrette

- **Host Committee**
- **Pre-Charrette Interviews with 55 elected officials, business leaders, residents, community activists, and utility providers**
- **Public Workshop to shape vision**
- **Design Studio**
- **Work-in-Progess Presentation**

During the charrette week of May 14 - 20, 2016 the design team developed many drawings and analyses to help provide direction on potential improvements to South Florida Avenue.

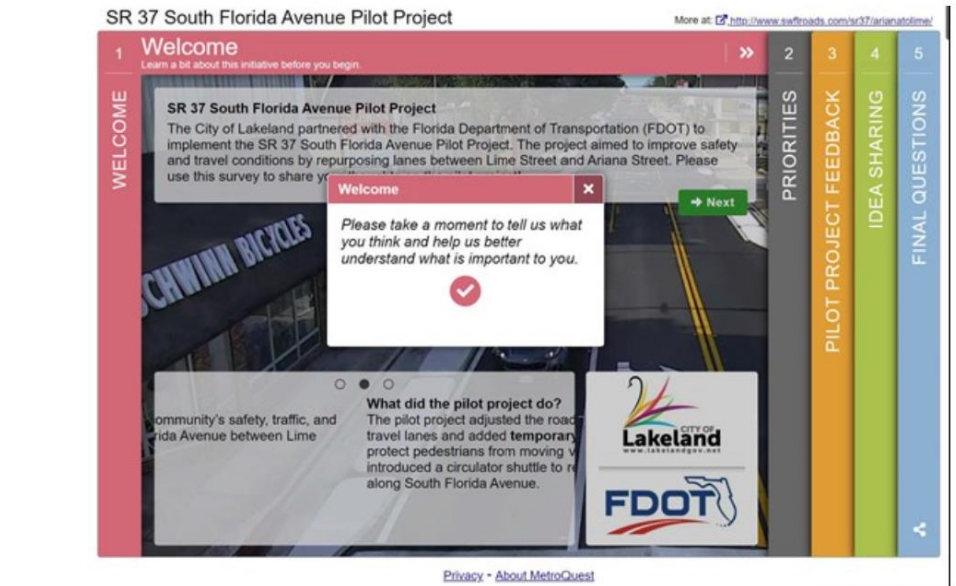


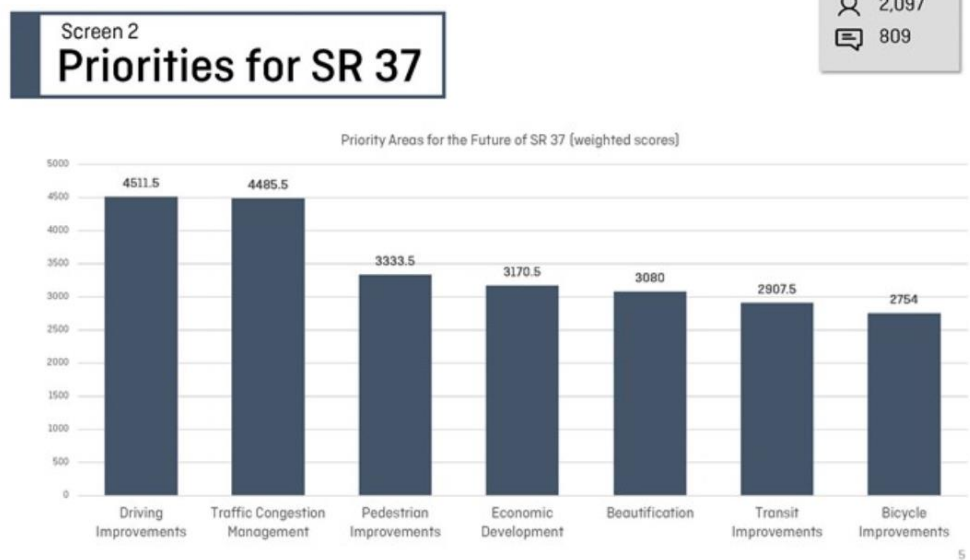
Participants said:

- Safety is the utmost concern!
- The corridor should look like a unique area, addition of markers and aesthetically pleasing street lamps, and monuments.
- Better lighting and friendly streets to “civilize the corridor”.
- In favor of lane elimination for wider sidewalks but concerned about how the traffic would be rerouted.
- Pedestrian-friendly corridors are important!
- “There is a lot of opportunity for redevelopment, and if the corridor is done correctly, the area will just boom.”
- “The better the aesthetic solutions, the more likely we are to create a traffic environment to discourage (through) trucks.”

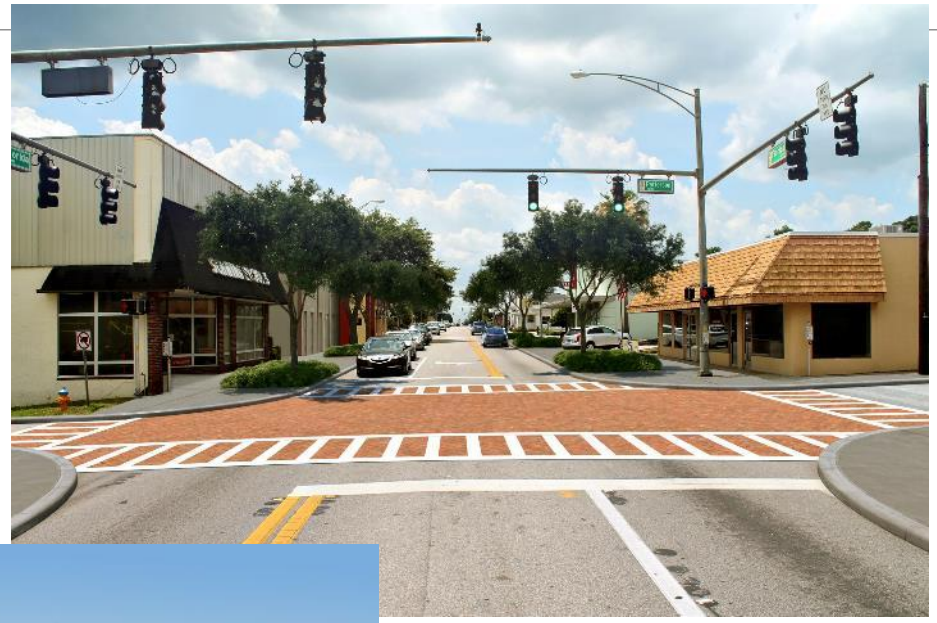
Florida Department of Transportation Survey

The FDOT conducted a survey using the MetroQuest platform, which allowed residents to drop pins on a map and share specific suggestions or comments. The survey received 2,276 responses. Participants' top priorities included driving improvements, traffic congestion management, pedestrian improvements, economic development, and beautification. More information about the results will be presented to the city commission in the fall.





Imagining the Possibilities…



Roadway Capacity

Community Revitalization

Images by Treasure Coast RPC

Corridor options

- The Lakeland Community Redevelopment Agency contracted with **Ayres Associates Inc.** to create a vision for the corridor, including a variety of potential lane alignments.
- These are some **preliminary options**. Others will also be considered.

Variables include:

- Number of lanes (2, 3, or 4)
- Median or no median
- Turn lane or no turn lane
- Sidewalk width (5 ft–12 ft)
- Dedicated or shared bike lanes
- Bus bays, bus lanes, or no special accommodation for buses

Beautification and Economic Development

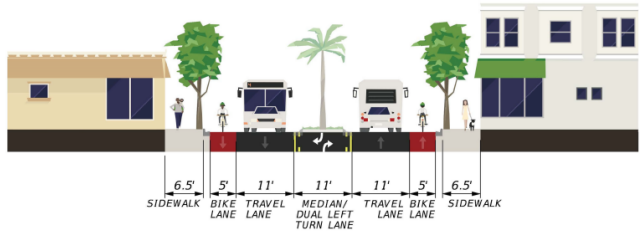
Options include:

- Shade trees and landscaping
- Decorative streetlights and furnishings
- Mid-century inspired design theme
- Sidewalk improvements
- Architectural markers and street art
- Improved alley access

South Florida Avenue & FL Wright Way
4 LANE UNDIVIDED WITH SHARED BUS/BIKE OUTSIDE LANES WITH 6 FT. SIDEWALKS OPTION

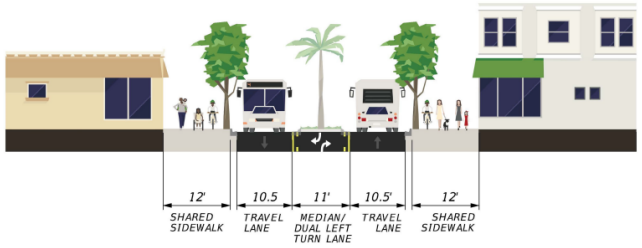
1

2 LANE DIVIDED WITH BIKE LANES



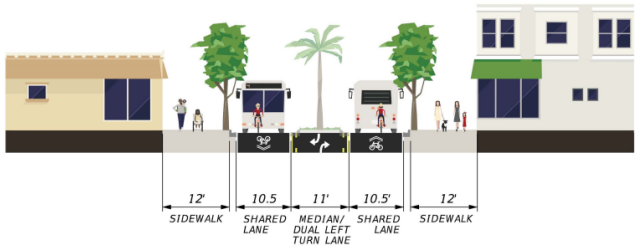
2

2 LANE DIVIDED WITH 12' SHARED SIDEWALKS



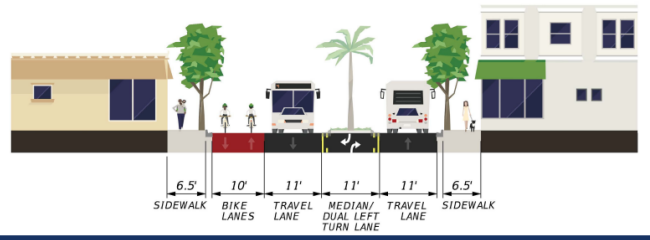
3

2 SHARED LANE DIVIDED WITH 12' SHARED SIDEWALKS



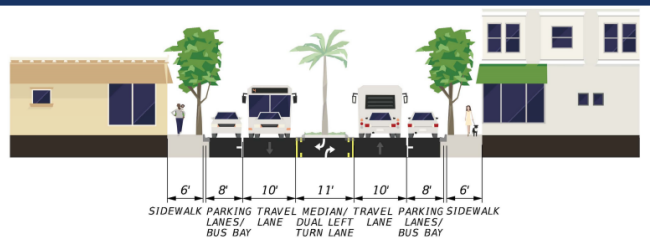
4

2 LANE DIVIDED WITH 10' DUAL BIKE LANES



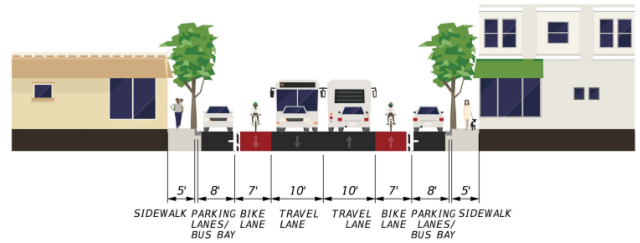
5

2 LANE DIVIDED WITH 8' PARKING LANES/BUS BAY



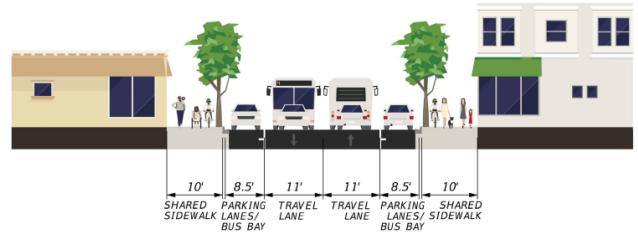
6

2 LANE UNDIVIDED WITH 8' PARKING LANES/BUS BAY AND 7' BUFFERED BIKE LANES



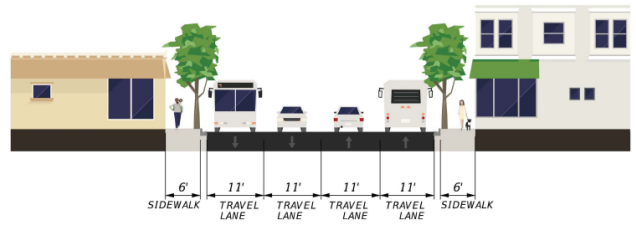
7

2 LANE UNDIVIDED WITH 8.5' PARKING LANES/BUS BAY AND 10' SHARED SIDEWALKS



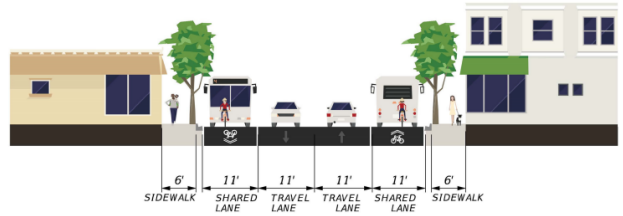
8

4 LANE UNDIVIDED



9

4 LANE UNDIVIDED WITH SHARED OUTSIDE LANES



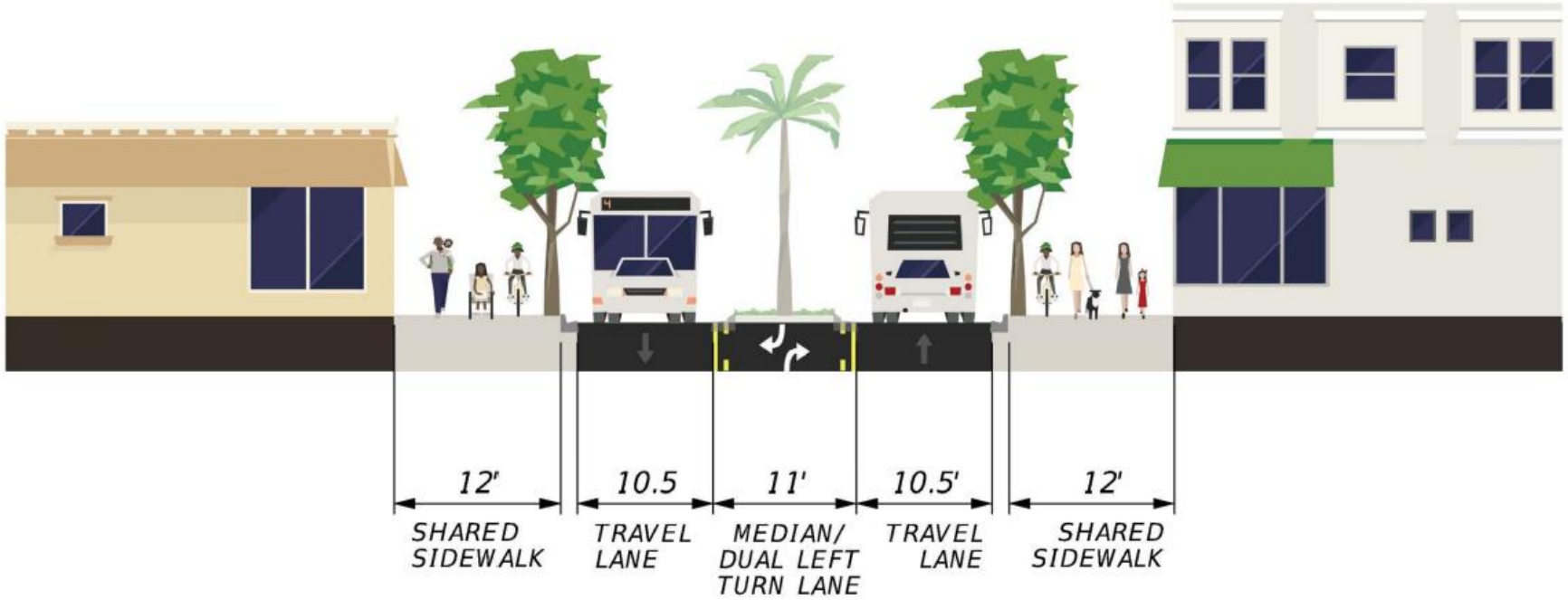
Variables include:

- Number of lanes (2, 3, or 4)
- Median or no median
- Turn lane or no turn lane
- Sidewalk width (5 ft–12 ft)
- Dedicated or shared bike lanes
- Bus bays, bus lanes, or no special

And the winner is……

2

2 LANE DIVIDED WITH 12' SHARED SIDEWALKS



Next steps….

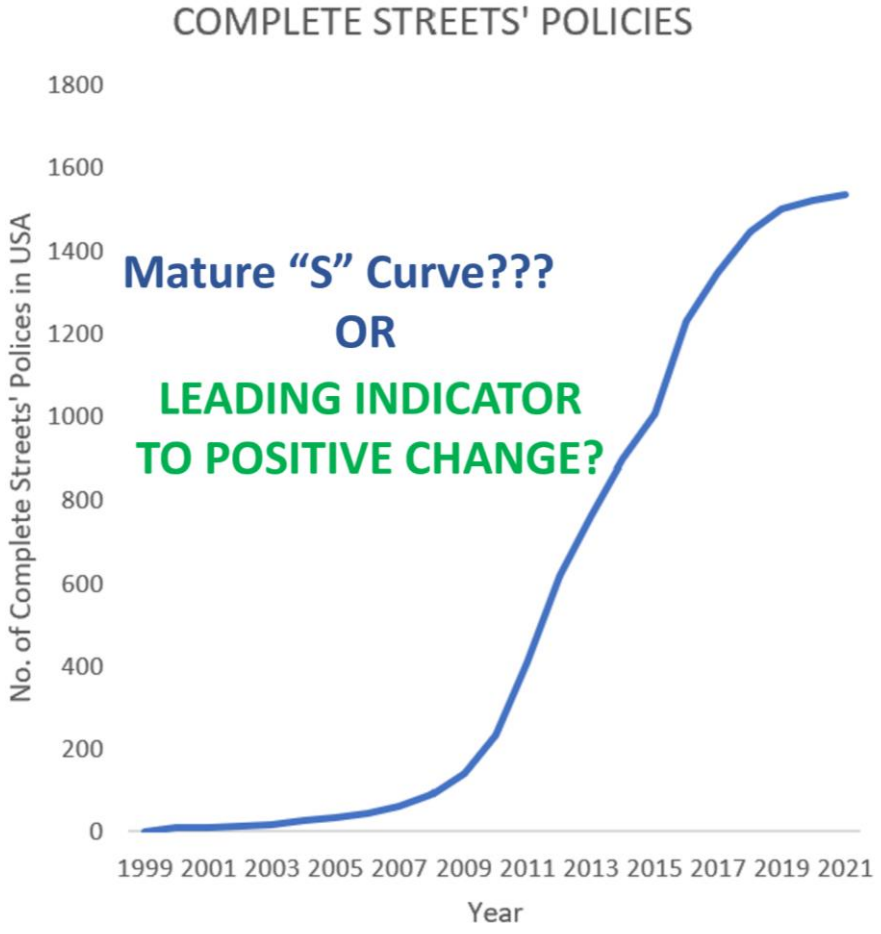
Lakeland City Commission and FDOT D-1 to negotiate:

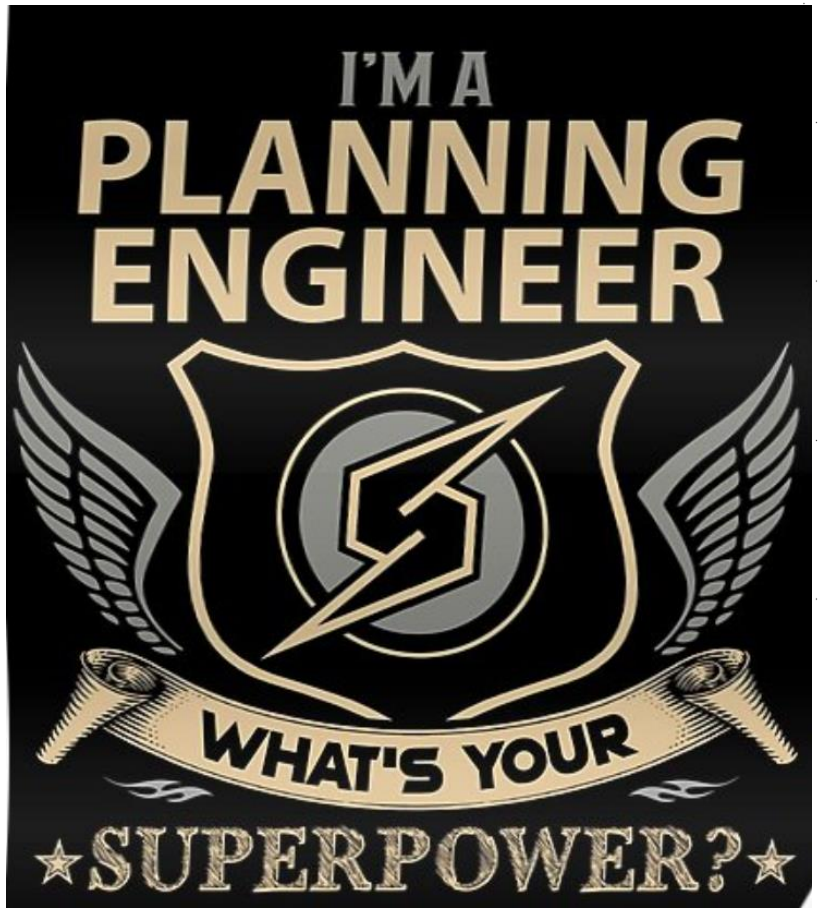
- design,
- operational, and
- construction phasing.

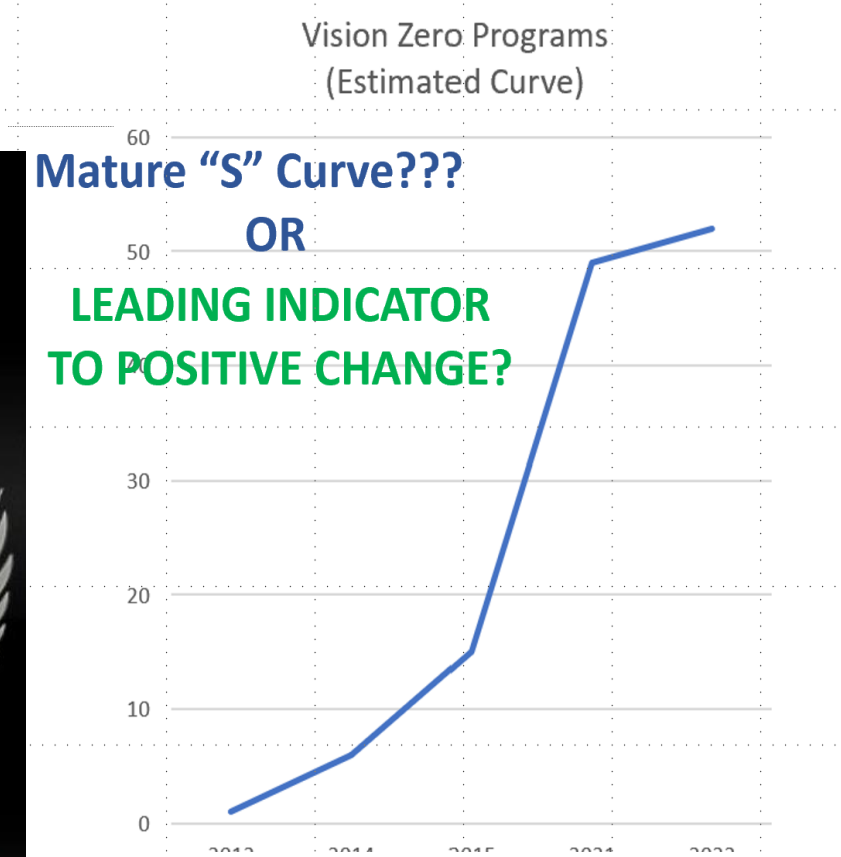
GET **FIRED UP!!**

YOU HAVE THE SUPERPOWERS TO CREATE "PLACE" FOR ALL TRANSPORTATION USERS SO LET'S GO NOW!

Could the
Complete Streets and Vision Zero
Fired Up Superpowers
save the day?








THE BEATLES
From New York to Daly City
16 shows in 10 cities
NORTH AMERICAN TOUR 1965
THE BEATLES
Yours truly on drums 2022
55,000 screaming fans
The smallest Live Band Crowd Ever!!
ATLANTA STADIUM
THE BEATLES
1:32 / 16:58 • Stadium Rock

“Right-Sizing S. Florida Avenue (SR 37) in Lakeland, FL This is a Test. Only a Test”

Courtesy Promotes Safety:

Please SLOW DOWN and give pedestrians and bicyclists a BRAKE!

Julie Townsend, Executive Director, Lakeland Downtown Development Authority
jtownsend@ldda.org 863.687.8910

Angelo Rao, PE, Complete Streets Practice Leader, S&ME, Inc.
arao@smeinc.com 813.468.4658

Thanks again to Chuck Barmby!!

DOWNTOWN LAKELAND™