

Multimodal Mobility in Modesto



1 GREAT STREETS


2 WALKABILITY

3 BIKEABILITY





1 GREAT STREETS

An aerial, high-angle photograph of a city street intersection. The scene is dimly lit, possibly at dusk or dawn. In the upper left, a person is riding a bicycle on a designated bike lane marked with yellow bicycle icons and arrows. To the left of the bike lane, a person is walking with a stroller. In the center, a person is pushing a baby carriage. In the lower center, another person is riding a bicycle. To the right, a person is walking with a stroller. A white car is stopped at a traffic light in the upper right. The street has various markings, including a 'SIGMA' sign and a '424' sign. The overall atmosphere is one of a busy, multi-modal urban environment.

Great Streets balance the need to move people from place to place with the need to provide public spaces for social interaction and economic exchange.

DESIGN MATTERS







Photo source | Google Earth

Community Vision

STREETS + CONNECTIVITY

J Street as a pedestrian-priority street 21

I Street and 9th Street as boulevards 2

Bike priority streets connecting Virginia Corridor, Junior College to west and TRRP 25

Improved pedestrian crossings on Needham, connections to Graceada Park 7

Notes: South, starting down 1 lane of 9th is a PARKED

DOWNTOWN IN 2040

vibrant	MATURE	Equitable	Vibrant	Green "breathe better"	Vibrant
Well-used	FILLED IN	Vibrant	Restored	INTERACTIVE	Energetic
VIBRANT	Lively	collective	Vibrant	ALIVE + WELL	Vibrant
Healthy	thriving	VIBRANT	HOME!	vibrant	Arrived ⚠️
Festive!	REVITALIZED	Exciting 2040	DESTINATION	RESIDENTIAL	unified
Populated	energetic	Modern	EXCITING	Vibrant	Model
Culture	RESTORED Repurposed Inclusive Accessible Active	DIVERSE	Focused	NO CONNECTIVITY	



2 WALKABILITY

ATTRIBUTES OF WALKABLE PLACES

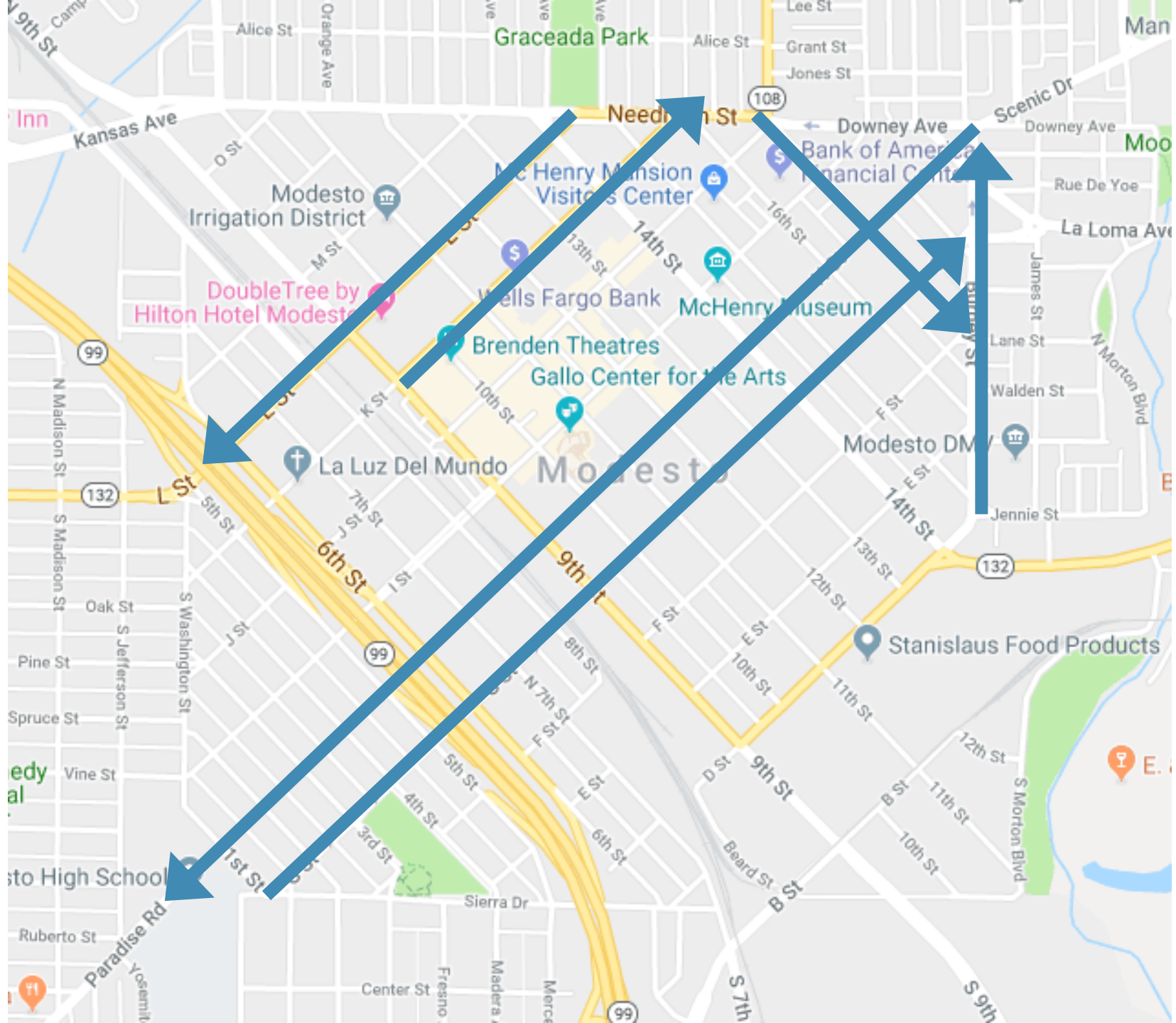
- i. Comfortable
- ii. Engaging
- iii. Accessible
- iv. Connected
- v. Convenient
- vi. Legible
- vii. Safe





STREET NETWORK

The street network
Should reinforce
The City's values

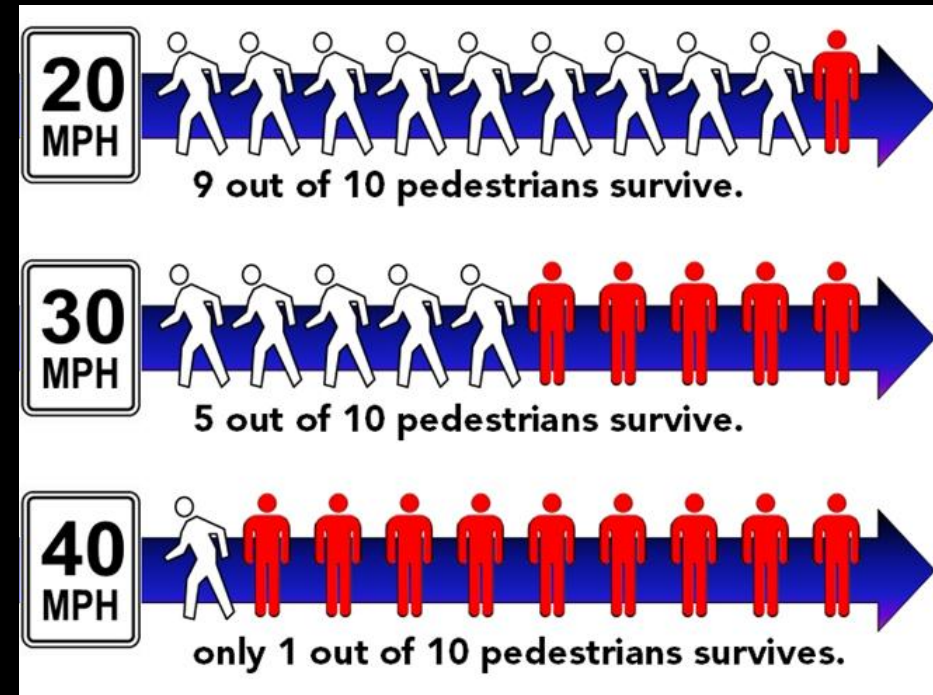


TWO-WAY STREET RESTORATION

- **Direct routing** for motorists, cyclists, and transit riders
- **Revitalization** and place-making
- **Better image** – do-not-enter signs, place vs thoroughfare
- **Increased access** to businesses
- Respects **historic intent**: better social & economic exchange
- **Redundancy** for events, parades, maintenance, emergencies...
- **Easier way-finding** and tourism
- **Easier Enforcement** – less speeding, reckless driving, weaving, wrong-way travel

SAFETY

- Reduced speeding on two-way streets
- Slower speeds
 - *Reduces crashes*
 - *Increases comfort*
 - *Eliminates “double threat”*



Av
200 W



LaSalle Av
200 W



20

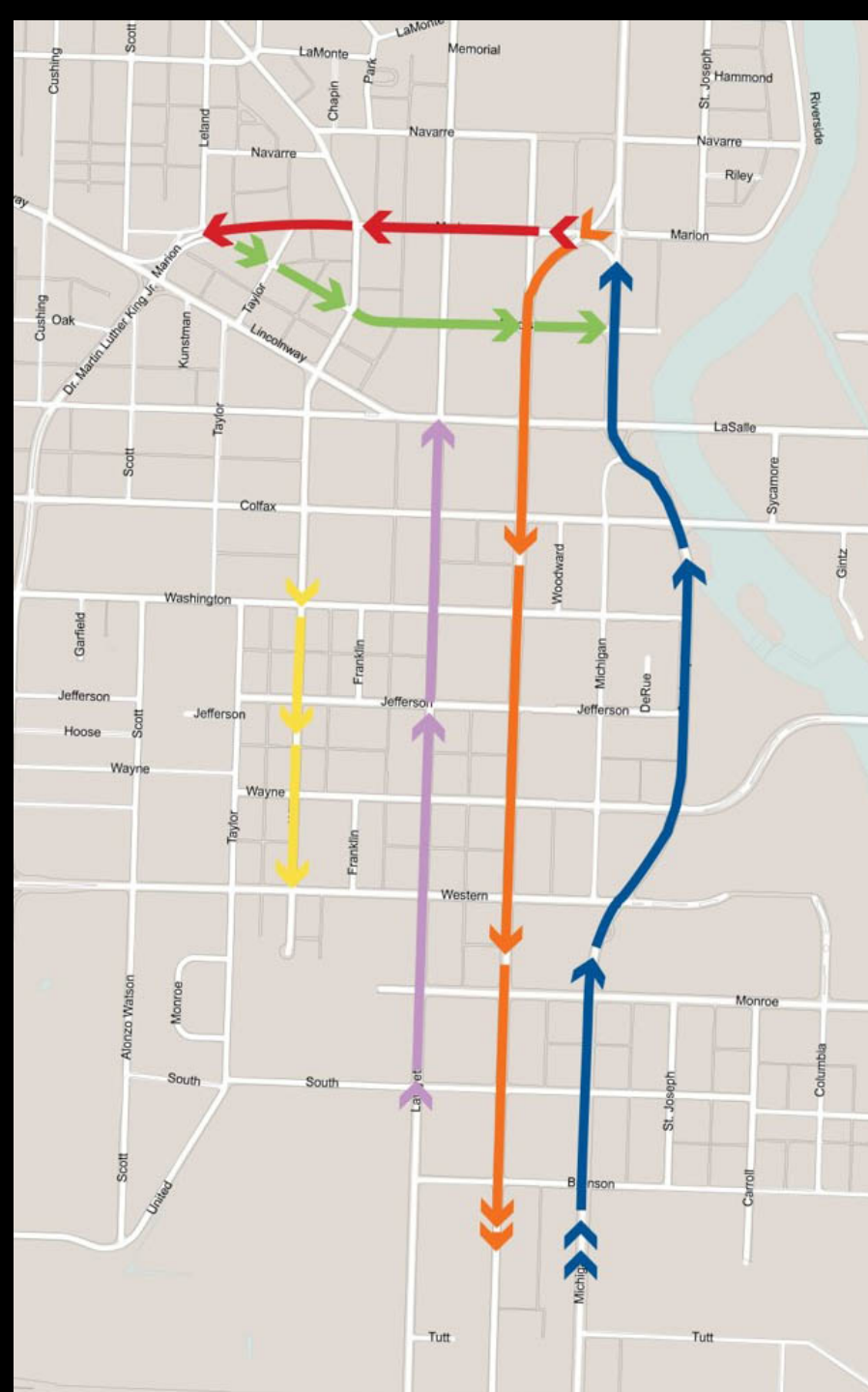
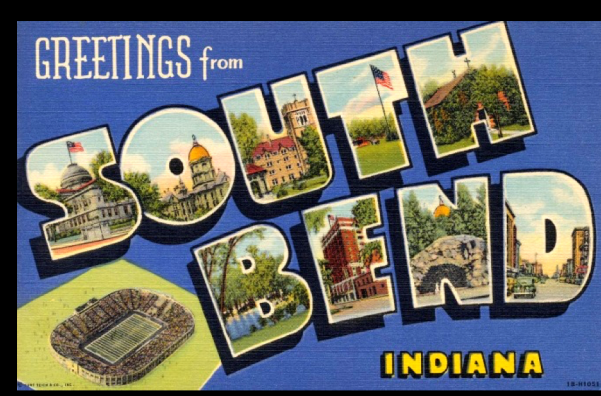
WY TECH

933

31

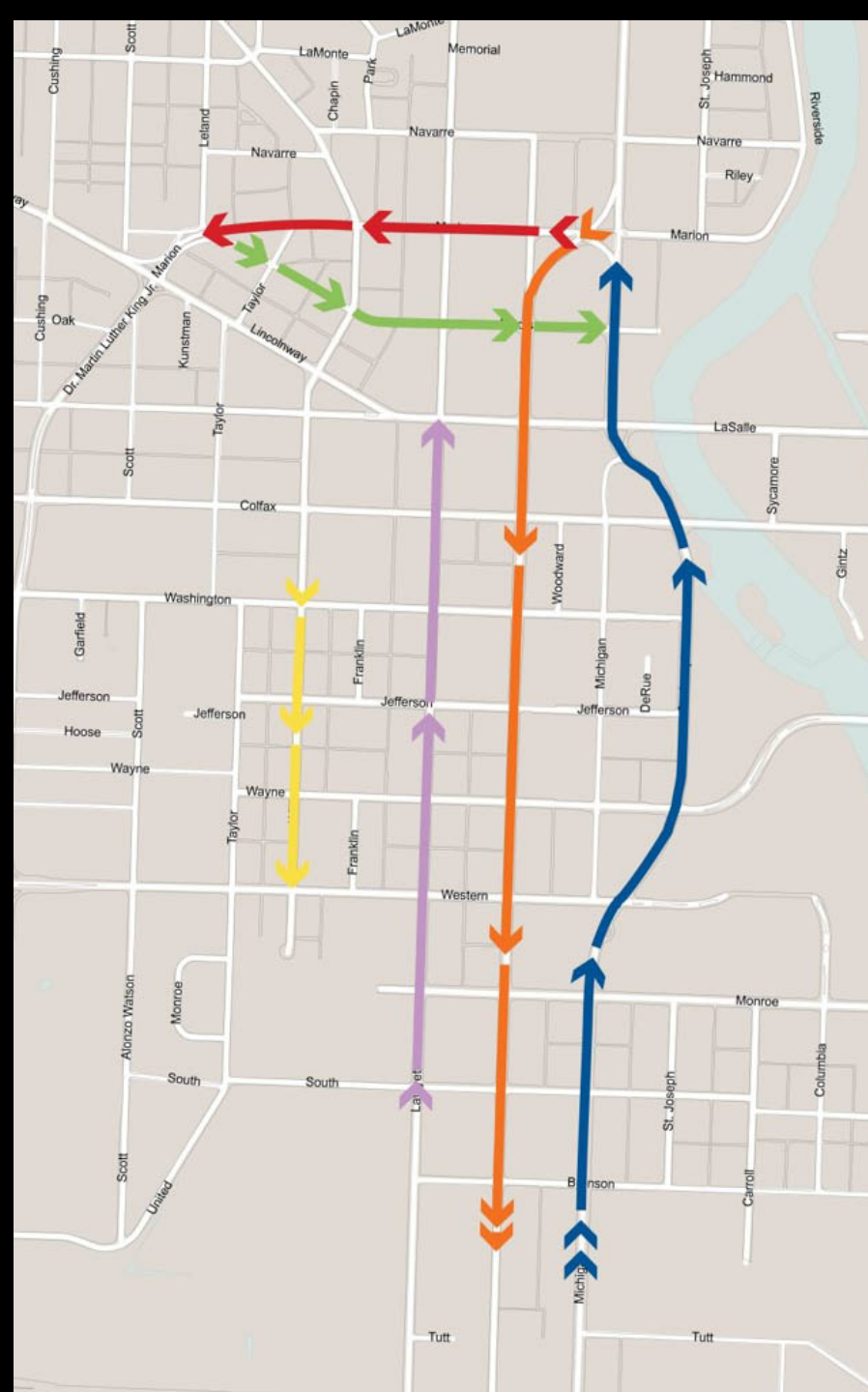
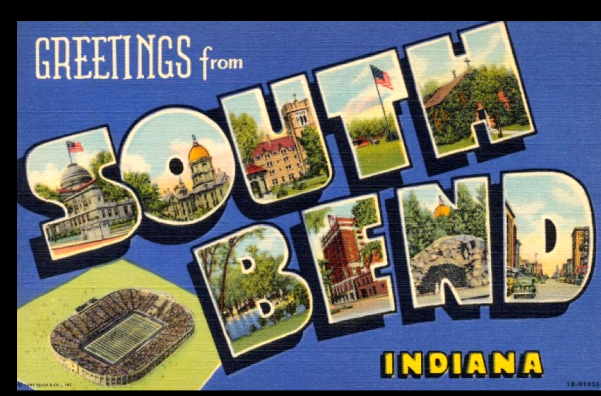
WY TECH





South Bend, Indiana

- 1-way State routes run through downtown
- 1-way City streets in downtown
- LOS for motorists top priority
- disinvestment, no infill & no redevelopment in downtown
- Loss of tourism and recreation to nearby communities



- # Major Changes
- every 1-way pair restored to 2-way
 - every multi-lane 1-way street dieted to 2 lanes (some with left turn lanes)
 - every street became a complete street
 - over \$100M private investment during implementation



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Before



After

Main Street

4-lane, 1-way, street restored to 2-lane, 2-way, street with left turn lanes, wide sidewalks, separated bike facilities, street trees, rain gardens & on-street parking



3 BIKEABILITY



4 - 7%

Highly confident

5 - 9%

Somewhat confident

51 - 56%

Interested but Concerned



lower stress tolerance

higher stress tolerance





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Highly confident

5 - 9%

Somewhat confident

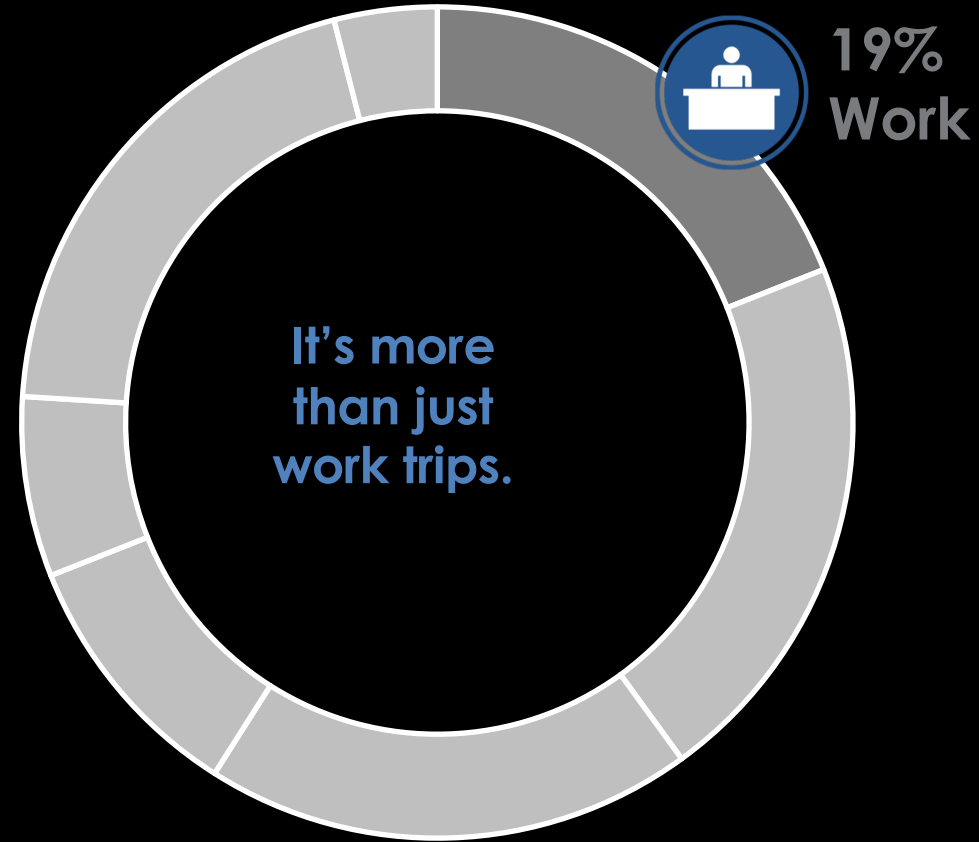
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A NETWORK FOR EVERYONE



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Who would ride here?





Who would ride here?





Who would ride here?



PROTECTED BIKEWAYS

Safety:

- Minimize conflicts
- Encourage yielding
- Delineate space
- Provide consistency



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Connectivity:

- Provide direct, seamless transitions
- Integrate into multimodal network



PROTECTED BIKEWAYS

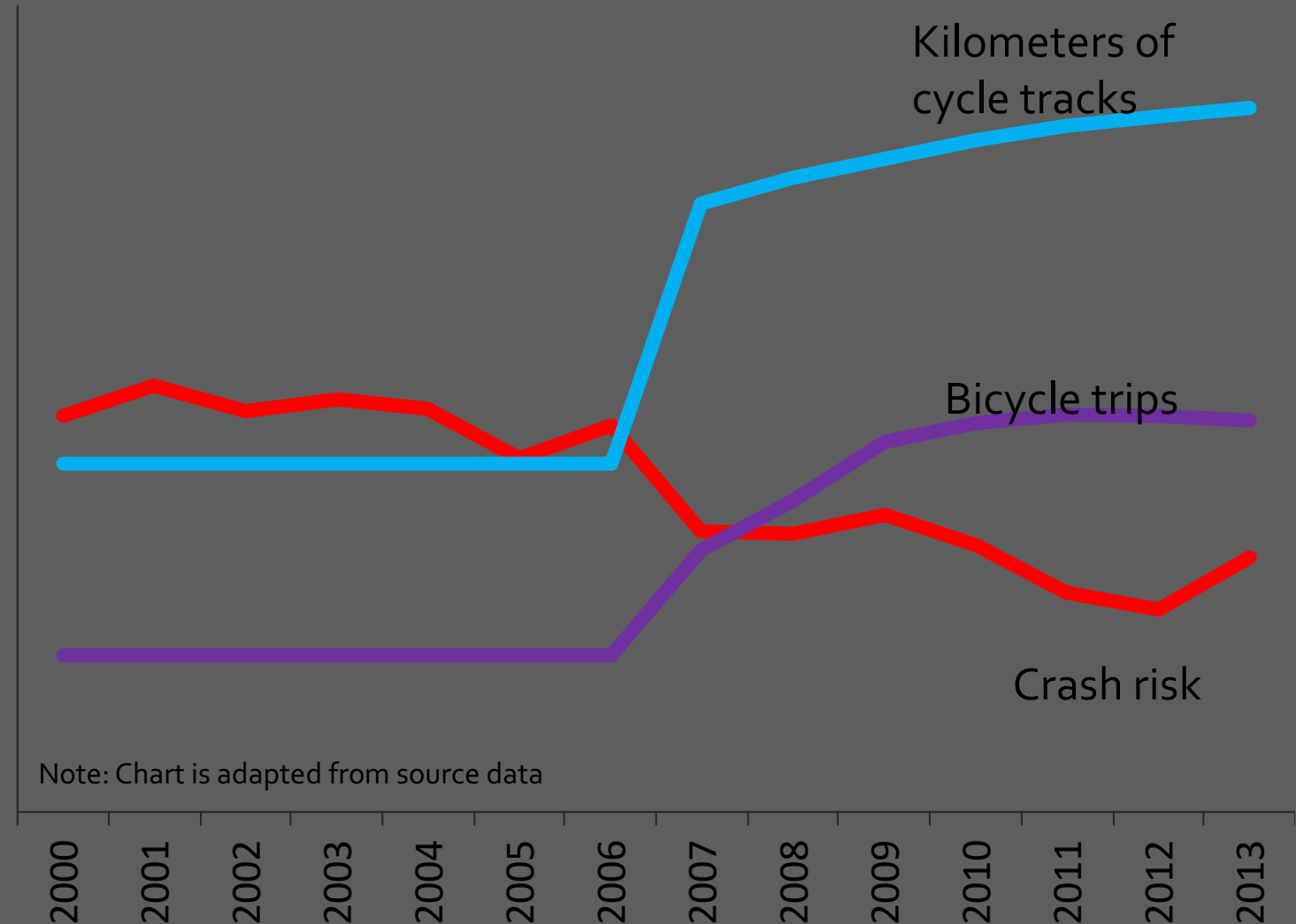
- Attract more people to bicycling
- Improve safety for all road users
- Preferred by motorists and bicyclists
- Preferred by women



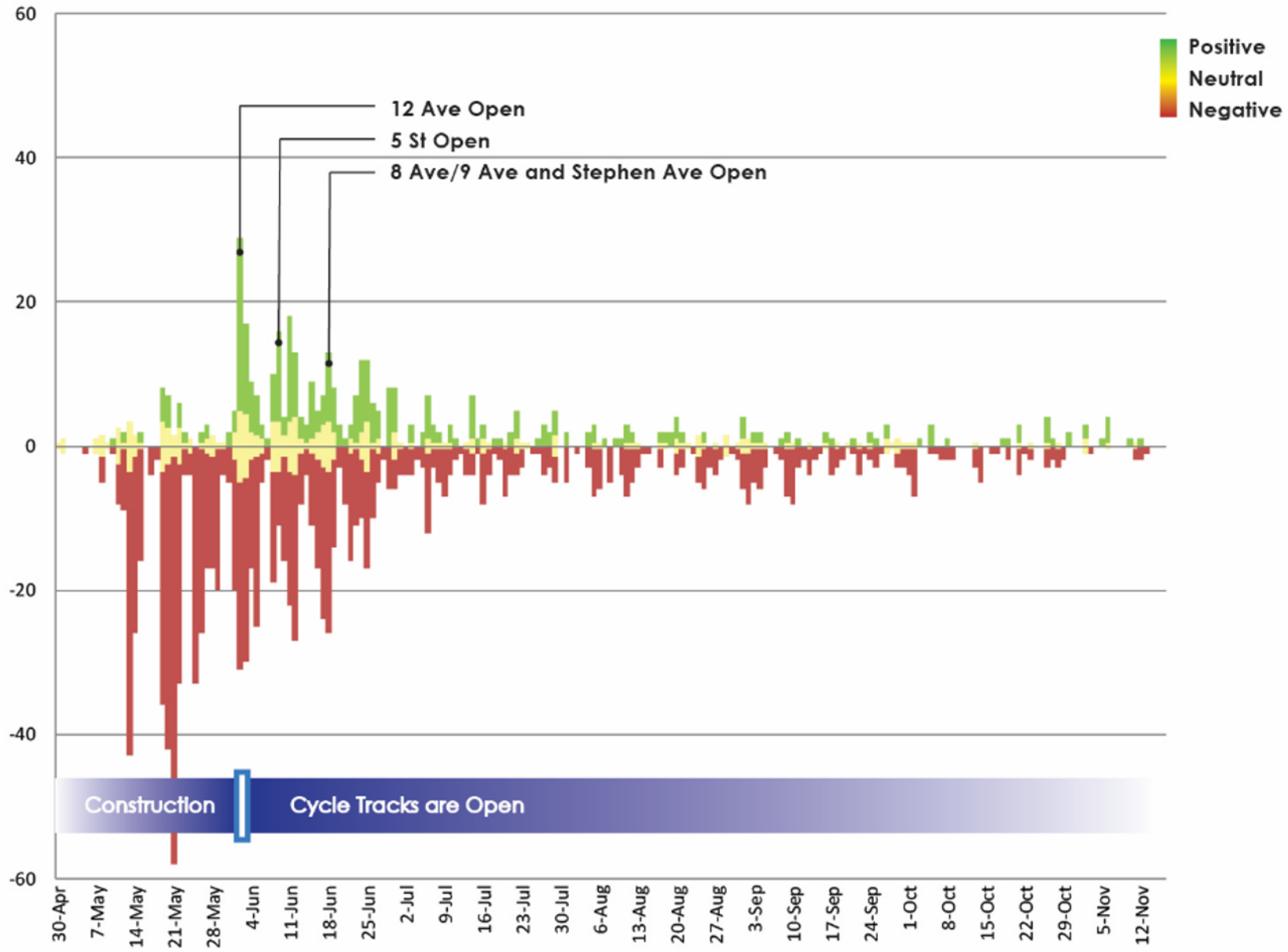
SAFETY BENEFITS

Seville Spain

- Action
- Built 36 mile separated bike lane network in 1 year (2006)
- 48 mile connected network
- Results
- bicycle trips up 435%
- Cycling risk per million bicycle trips decreased by 64%
- **Bike mode share**
 - 1% in 2006
 - 5% in 2007
 - 9% in 2013



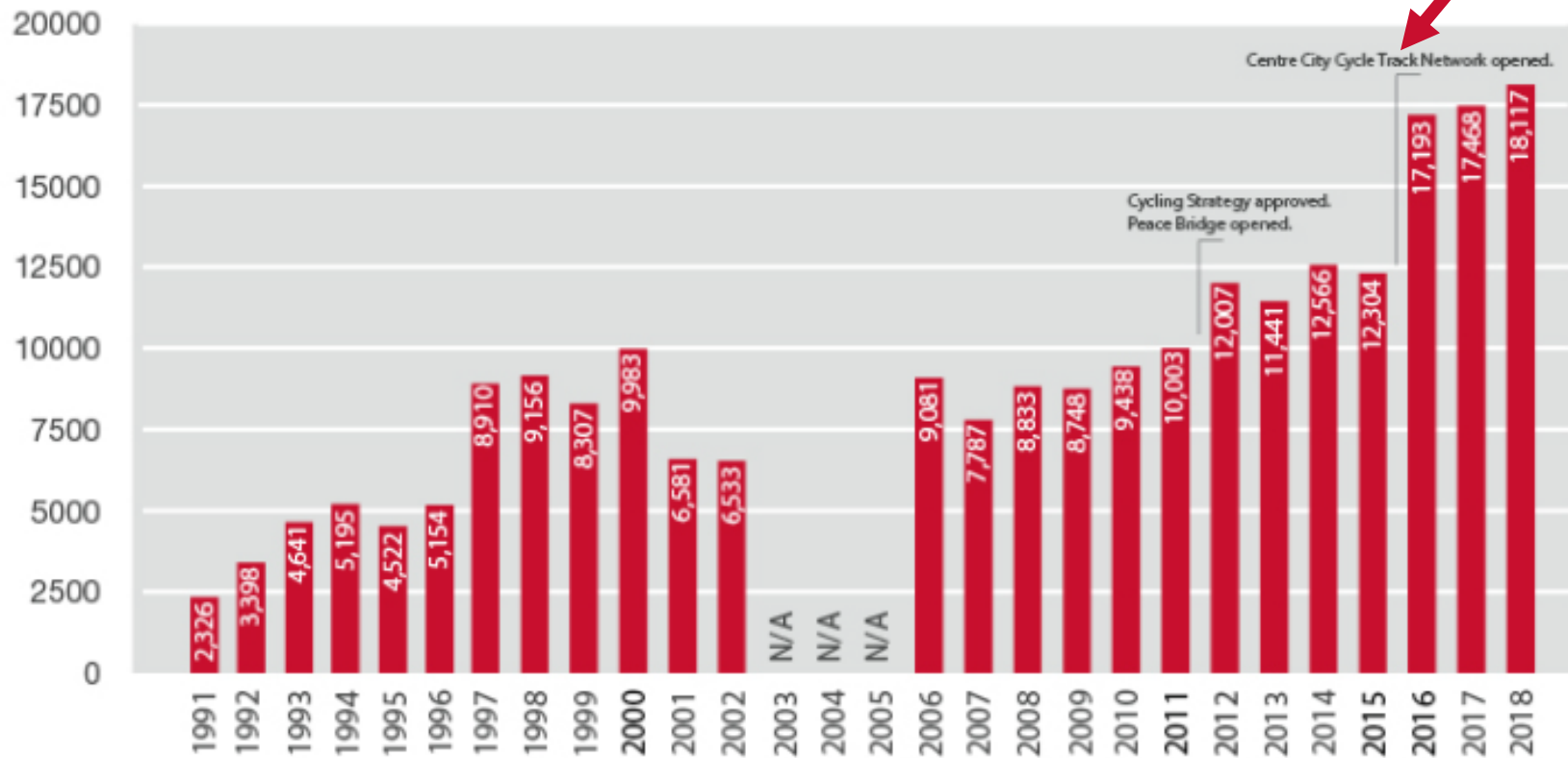
Tone of 311 Calls Received



INCREASED RIDERSHIP



Total Downtown Bicycle Trips
Annual May Count



PROTECTED
BIKEWAY
NETWORK
OPENED

47% increase in
ridership from
2015 to 2018.

Source: The City of Calgary Central Business District Cordon Count. The total number of bicycles entering and exiting the downtown are counted annually on a weekday in May from 6 a.m. to 10 p.m.

ECONOMIC BENEFITS

BIKE SHOPPING: SMALLER TRIPS, MORE VISITS

People who arrive to a business on bike spend less per visit but visit more often, resulting in more money spent overall per month. ¹²

In Portland, OR, people who traveled to a shopping area by bike spent 24% more per month than those who traveled by car.

Studies found similar trends in Toronto and three cities in New Zealand.

AVERAGE SPENDING
PER TRIP



Auto Bike

AVERAGE SPENDING
PER MONTH



Auto Bike

BETTER BIKING, MORE CUSTOMERS

When San Francisco reduced car lanes and installed bike lanes and wider sidewalks on Valencia Street, two-thirds of merchants said the increased levels of bicycling and walking improved business. Only 4 percent said the changes hurt sales. ¹⁴



BIKE LANES PART OF SALES BOOST

In New York City, after the construction of a protected bike lane and other improvements on 9th Avenue, local businesses saw up to a 49% increase in retail sales, compared to 3% increases in the rest of Manhattan. ¹⁵

9th Avenue



49% Increase in sales

Rest of Manhattan

3% Increase in sales



Thank you!

T'OOLE
DESIGN