



Building and operating roads that keep cities moving

Prepared for:
Colorado DOT | HPTE
February 2019



TRANSURBAN

Smarter ways to get around cities

\$32B
market cap

TOP 15
listed company on ASX



\$19B
of key infrastructure delivered with government partners

\$16B
in financed toll road projects in the last 12 months



\$1.3M in community investment

INNOVATION
in projects – procurement – financing – startup investment – operations – safety



\$1.6B
in supply chain spend

20,000+
current indirect jobs

2nd
transportation company globally
in the Dow Jones Sustainability Index



8.5M customers

1.5M daily trips

328,000 hours average workday travel time savings

CAPABILITIES

Designing and managing infrastructure for the long-term

A TRACK RECORD OF PARTNERING WITH GOVERNMENTS TO DELIVER INFRASTRUCTURE THAT MEETS THE LONG-TERM NEEDS OF GROWING CITIES'



Network planning/ forecasting



Community engagement



Development/ delivery



Technology



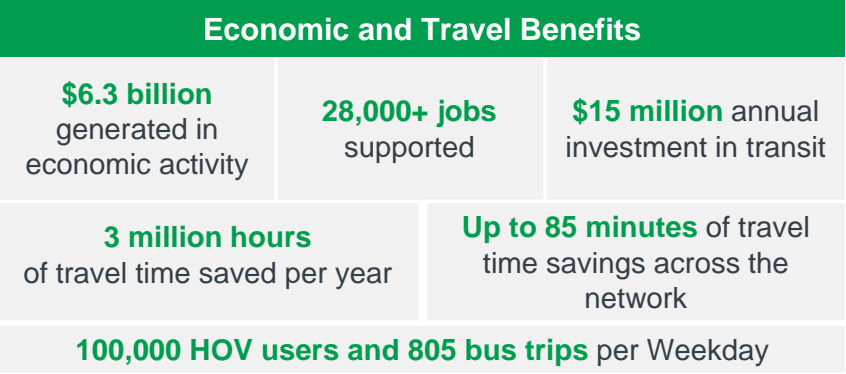
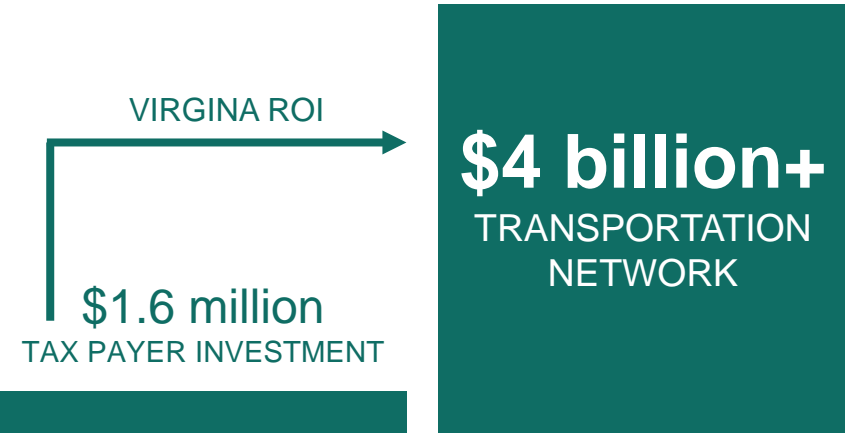
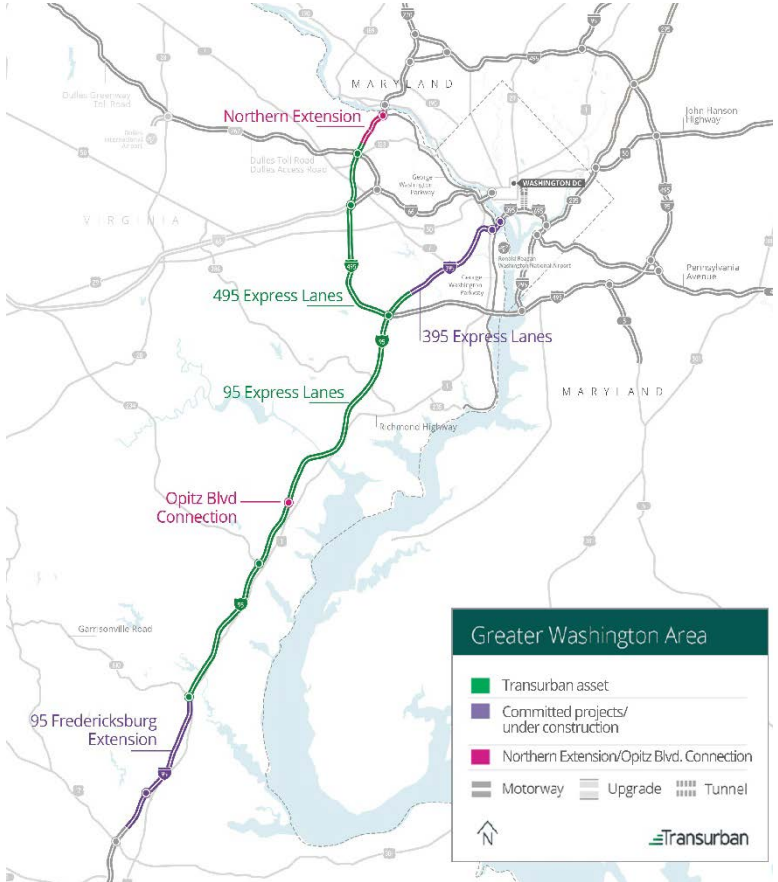
Operations and Safety



Customer management

NORTHERN VIRGINIA EXPRESS LANES NETWORK

Partnering to meet the needs of an evolving region



OPERATIONAL EXCELLENCE

The nation's first real-time, dynamically-priced managed lanes

24/7 traffic control
monitoring

Pricing and
congestion
management

Partner
coordination

Concession
management

Customer and
worker safety

Customer
experience and
engagement

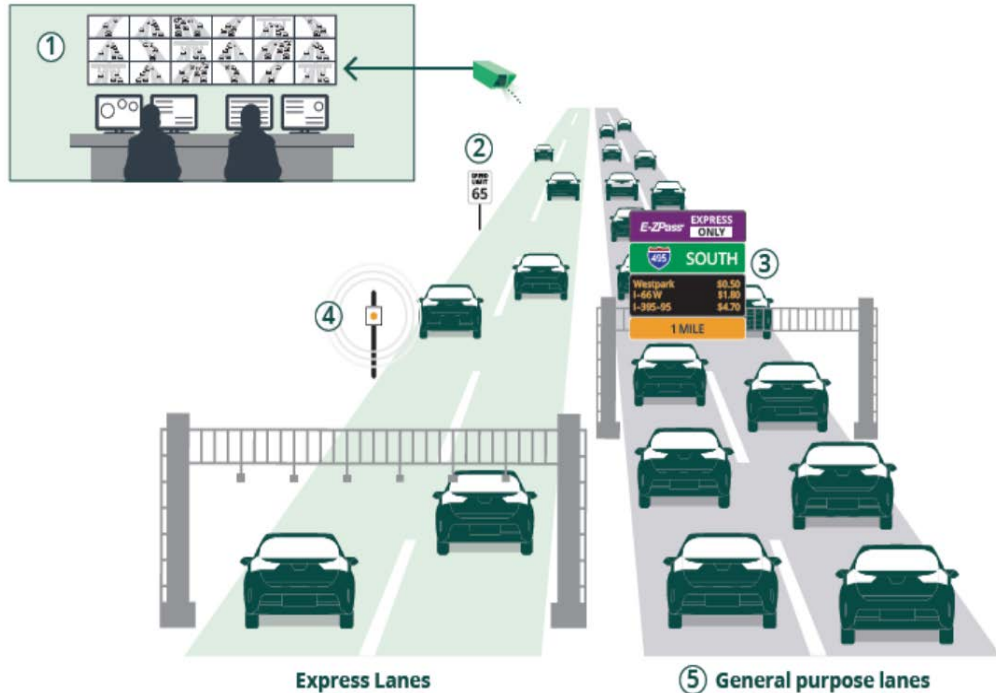
Lifecycle
maintenance

Monitoring and
enhancing
technology

Innovating for
tomorrow's roads

KEEPING TRAFFIC MOVING

How dynamic tolling works



- Express Lanes Operations Center**
 Real-time traffic monitoring 24/7 with incident detection dispatching dedicated response teams
- Managing traffic**
 Dynamic tolls manage demand to keep the Lanes moving above 45-55mph
- Toll prices**
 Toll prices are displayed on variable message signs in advance of Express Lanes entry points
- On-road technology**
 Roadside equipment monitors traffic density and toll prices are updated as often as every 10 minutes to adjust to changes in real-time traffic conditions
- Regular lanes**
 Traffic on the regular lanes is also monitored and can affect the toll price


PRICING AND CONGESTION MANAGEMENT

Optimizing network performance through real-time data


LANES ARE DYNAMICALLY PRICED TO MANAGE USAGE BY BALANCING VALUE OF TIME AND RELIABILITY WITH PRICE




SAFETY



SERVICE



CLIENT



VALUE

Data and reporting informs minute-to-minute adjustments based on analytic inputs like:

Queues

Density

Speed

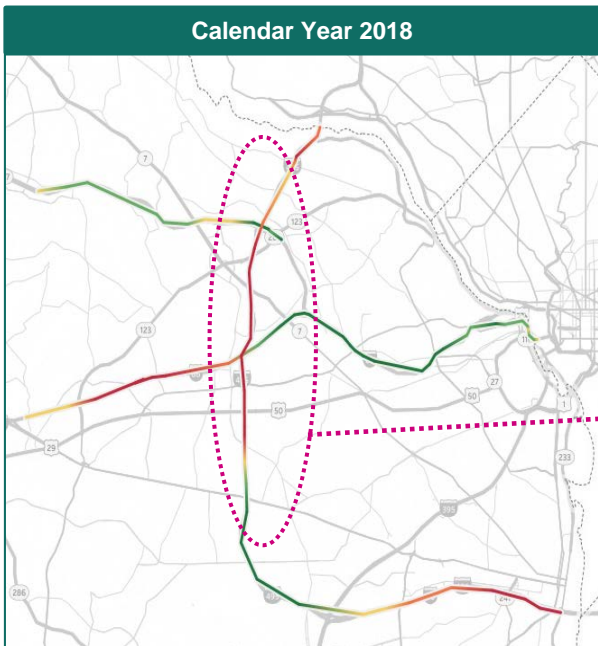
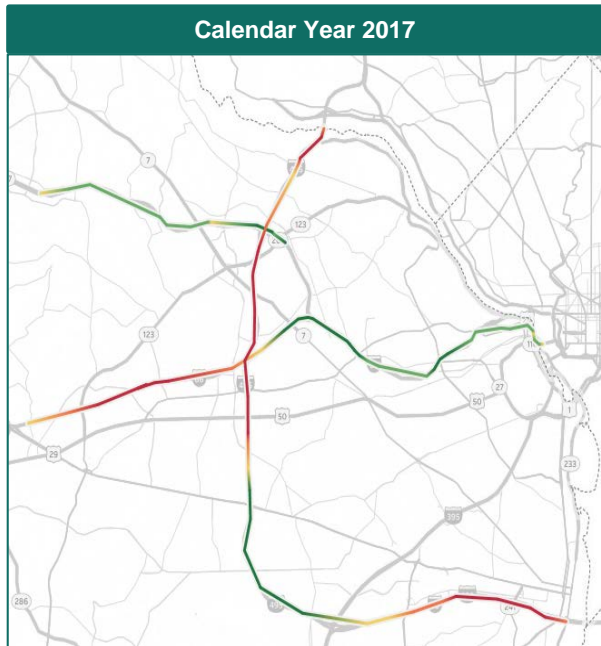
Volume

Incidents

Price

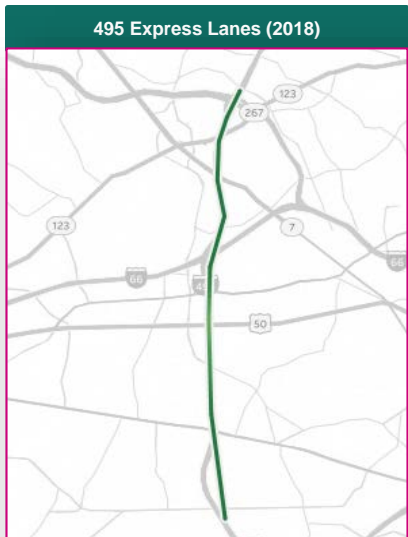
THE VALUE PROPOSITION

Active traffic management providing trip time reliability



25.00 65.00

Average PM peak speeds in the General Purpose on weekdays over the past two years highlight the value proposition of the Express Lanes



*Direction of travel shown is SB for 495 and WB for 267 & 66

NETWORK ENHANCEMENTS

Addressing congestion hotspots

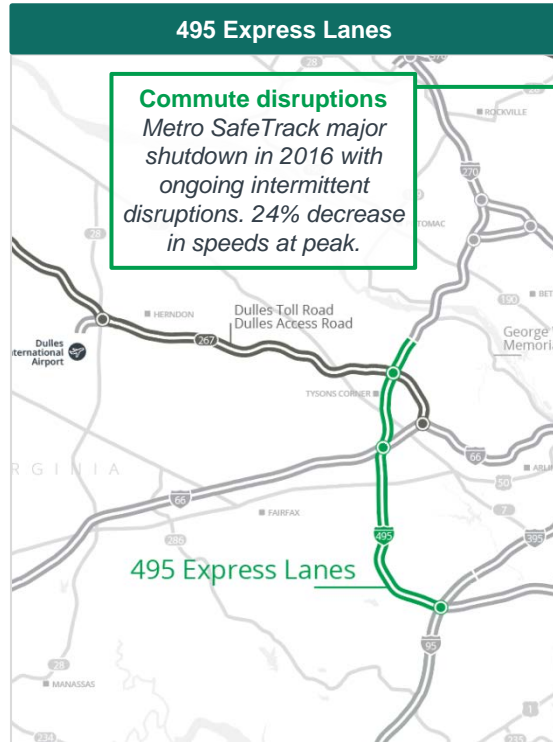
Average Southbound speeds in the Express Lanes on Thursdays during the PM peak highlight network improvements (Southern Extension) as well as the value of an Express Lanes trip



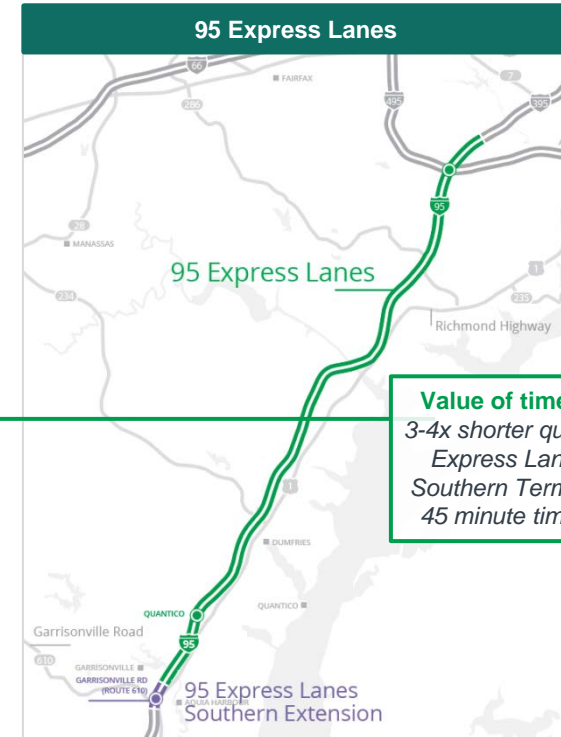
*Direction of travel shown is SB for 495 & 95

OPERATIONAL FLEXIBILITY

Monitoring and responding to external factors and customer behaviors



- External factors**
- Metro disruptions
 - Map services directing to Express Lanes
 - Corridor growth
- Customers**
- Demand
 - Behavior
 - Value of segments
- Response**
- Pricing of critical segments
 - Congestion management
 - Police and Express Assist management



PARTNERSHIP COORDINATION

Minute-to-minute coordination, spanning a decades-long commitment



LIFECYCLE APPROACH

A commitment to quality and service for a generation



UNDERSTANDING OUR CUSTOMER

Working families with young children

Customers use the Express Lanes for:



Commuting to work



Visiting family and friends



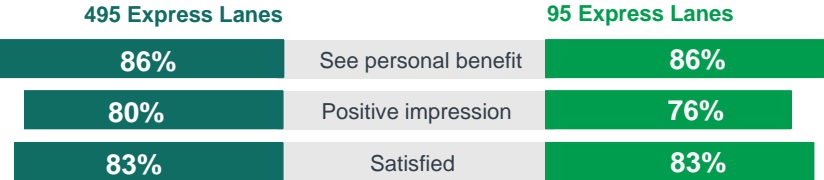
Getting to the airport



Vacation travel



Frequent customers see value



Frequent customers top 2 reported vehicles



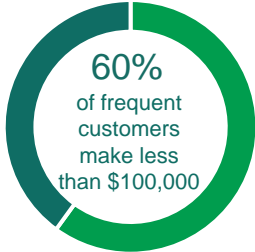
At least **7 in 10** customers check traffic apps when deciding to choose the Lanes



53% have children under the age of 18



73% use convenience services like Amazon at least once a month



IMPLEMENTING CUSTOMER PROGRAMS

Research and data-driven solutions to support customers

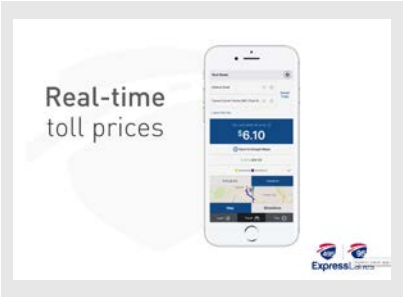
CUSTOMER SERVICE TEAM



CUSTOMER PROGRAMS & TRAVEL GIVEAWAYS



CUSTOMER TOOLS AND PRICE ALERTS



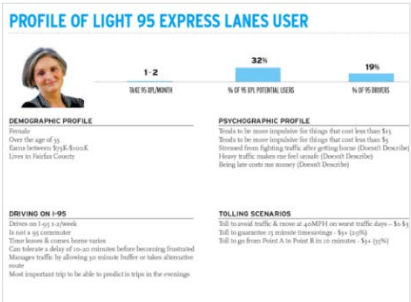
CUSTOMER AND ROAD SAFETY PROGRAMS



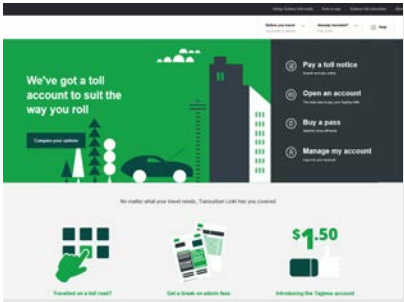
EDUCATION PROGRAMS



CUSTOMER RESEARCH



CUSTOMER WEBSITES AND COMMUNICATIONS

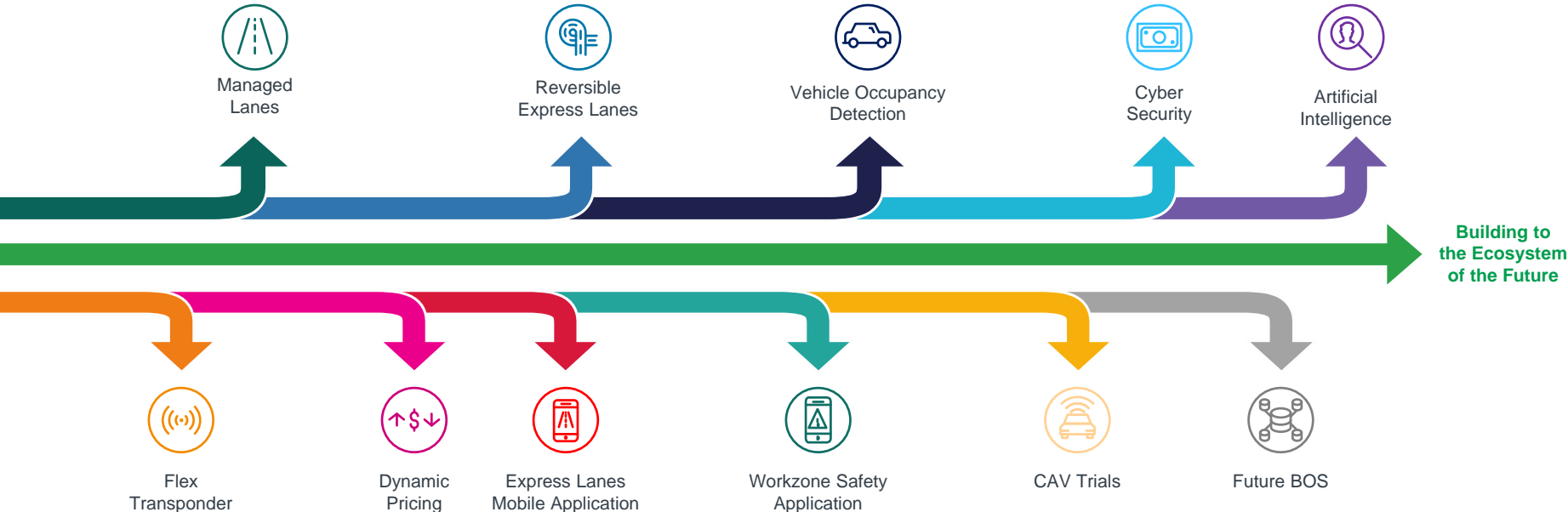


BREAKTHROUGH PUBLIC CAMPAIGNS



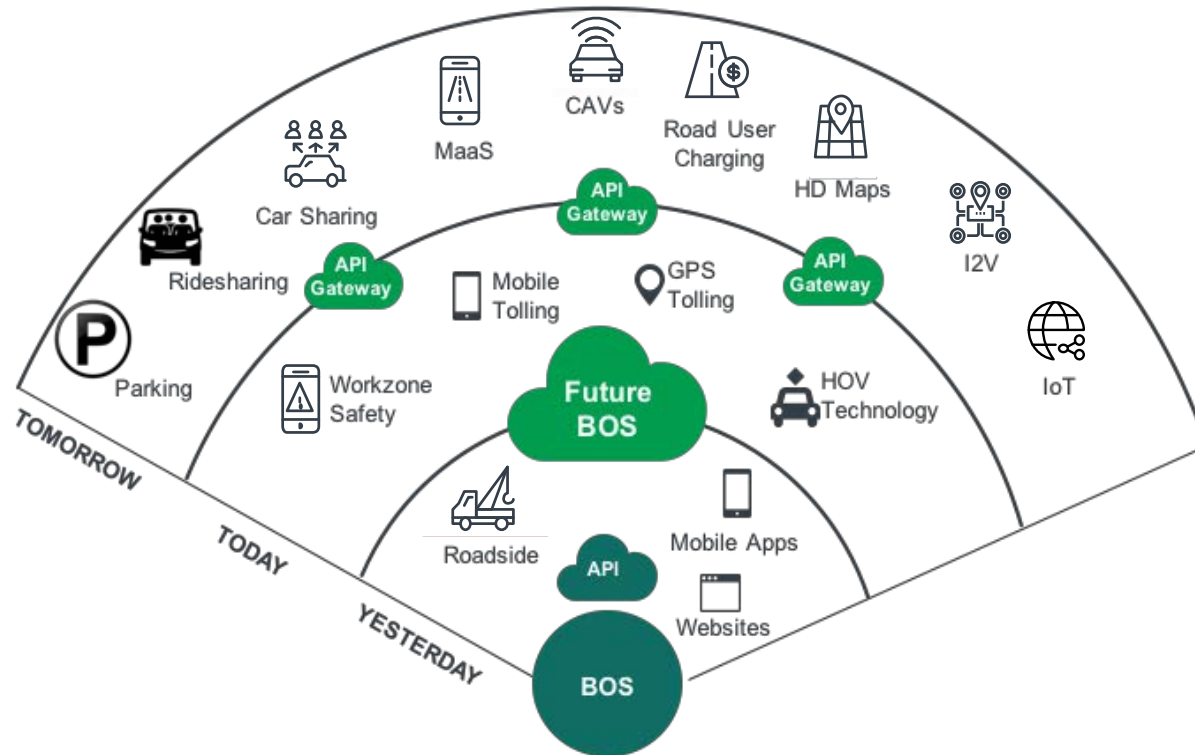
A HISTORY OF INNOVATION

Driving safer operations and improved customer experience



TOLLING TECHNOLOGY ECOSYSTEM

Evolving with the technology landscape



- ✓ Designing and building to support a rapidly evolving transportation and technology landscape.
- ✓ Foundation for our future: Transurban runs its own business through the Platforms we develop
- ✓ Platform 'leverage-able' by Strategic Partners including data sharing, MaaS, and the integration of future transportation trends like CAVs, Road User Charging.

TRANSURBAN INTERNAL SERVICE OFFERINGS

Back office tolling – one of many service offerings across the value chain



Asset Management



Road Equipment



Tolling Back Office

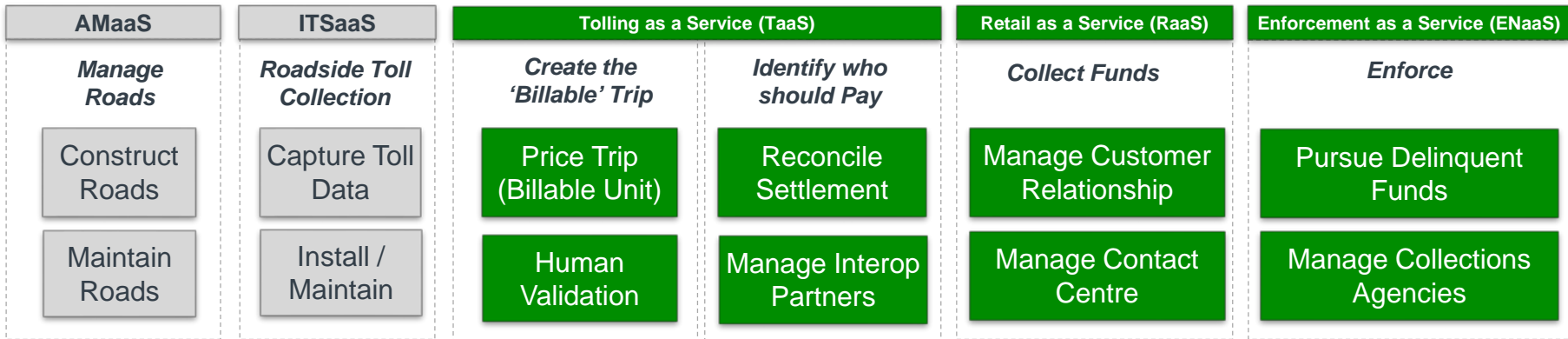


Customer

&



Channels



Back Office Services

READY FOR WHAT THE FUTURE HOLDS

Roads at the center of the mobility revolution





 Transurban

