

Operations as a service



Ohio Transportation Engineering Conference
Tuesday, October 2nd, 2018

Operations as a Service Presentation Outline

1. Is there a need for new models to provide TMC operations?
2. What does “**as a Service**” mean?
3. What does “**Operations**” mean?
4. Possible benefits of an Operations as a Service model in Traffic Management Centers



Is there a need to re-think how operations are provided?

- New sources of data inputs to TMCs are emerging
- Meaningful improvements in safety and mobility is needed
- Increased resources for operations are always a challenge

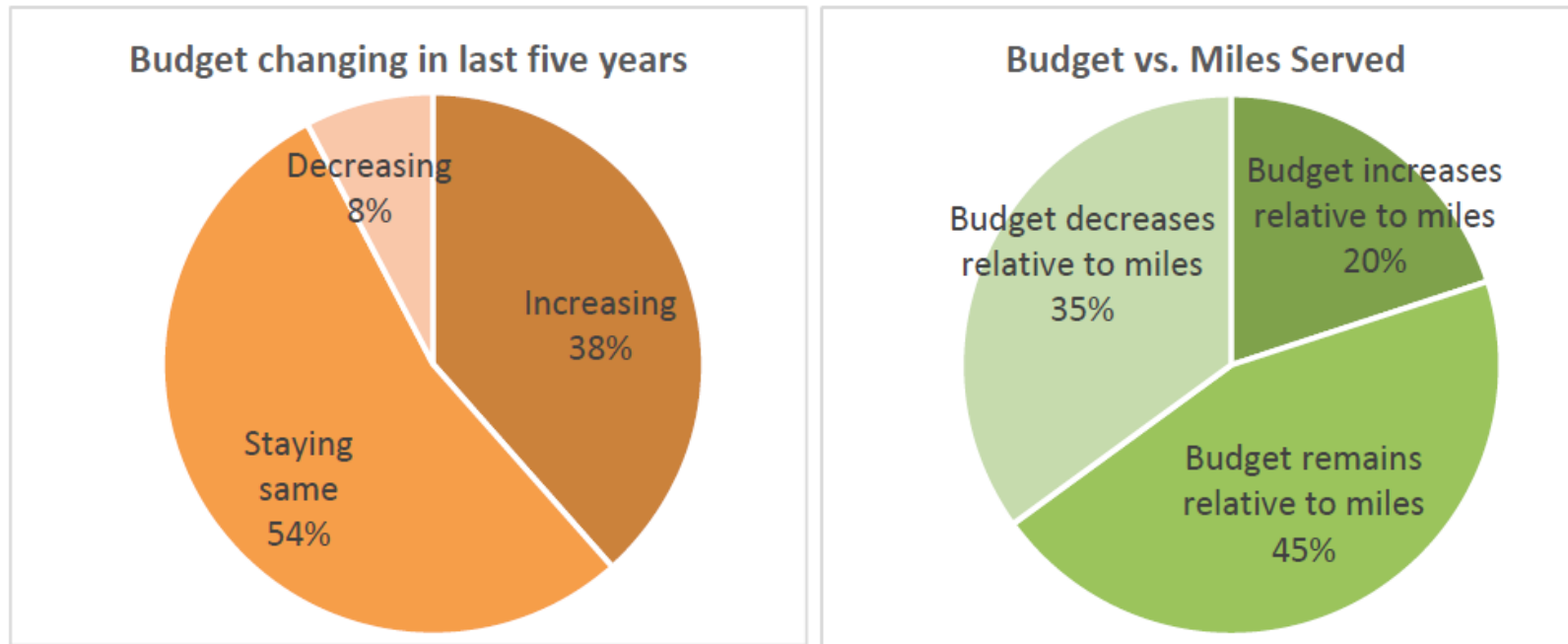
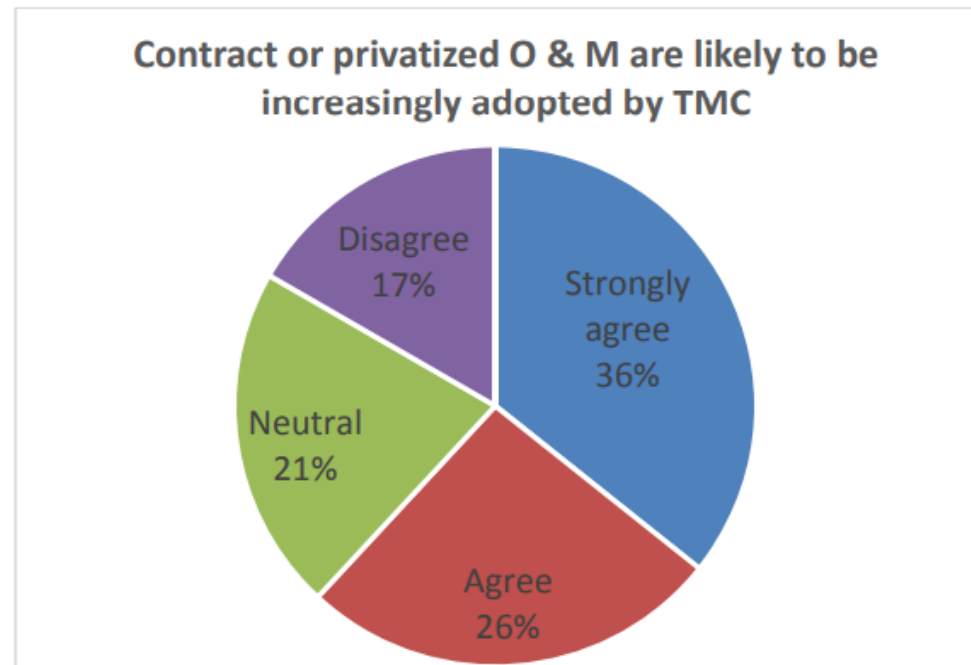


Figure 4 Annual budget and centerline mile changes in the past five years.

[Traffic Management Centers: Challenges, Best Practices, and Future Plans](https://trid.trb.org/view/1474448)
<https://trid.trb.org/view/1474448>

Is there a need to re-think how operations are provided?

- Q28. Contract or privatized operations and maintenance are likely to be increasingly adopted by TMCs, as it relieves the needs to acquire and maintain staff with the required skills (please choose only one).

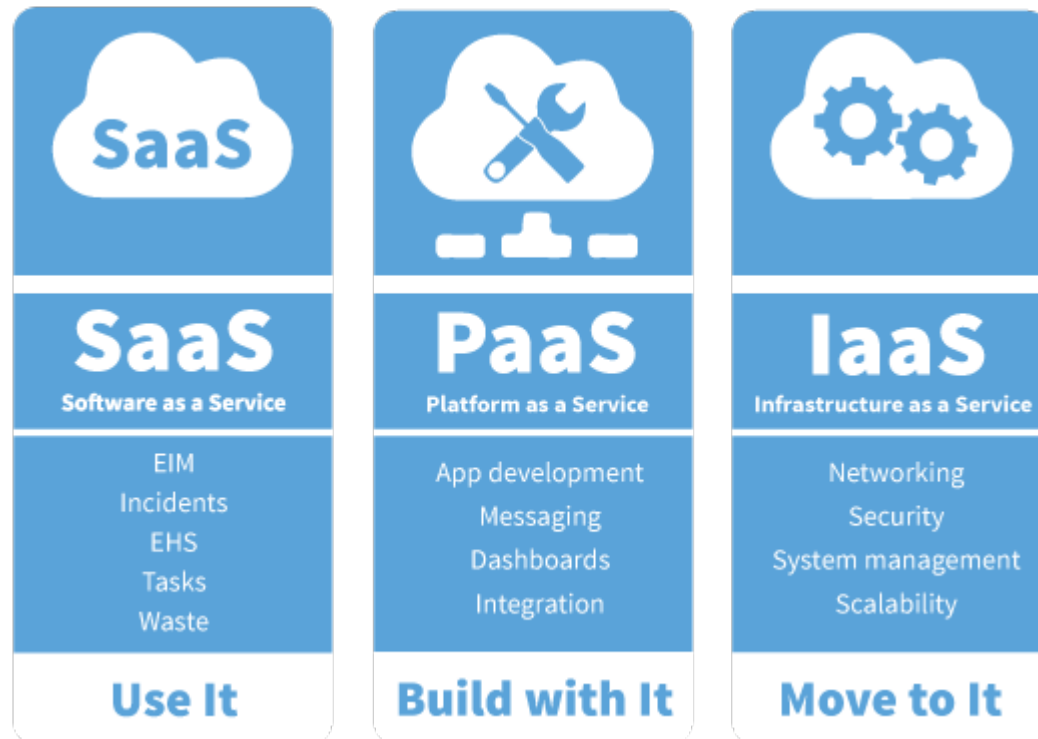


Attitude towards contract or privatized operations and maintenance.

[Traffic Management Centers: Challenges, Best Practices, and Future Plans](https://trid.trb.org/view/1474448)
<https://trid.trb.org/view/1474448>

What do we mean by “as a Service?”

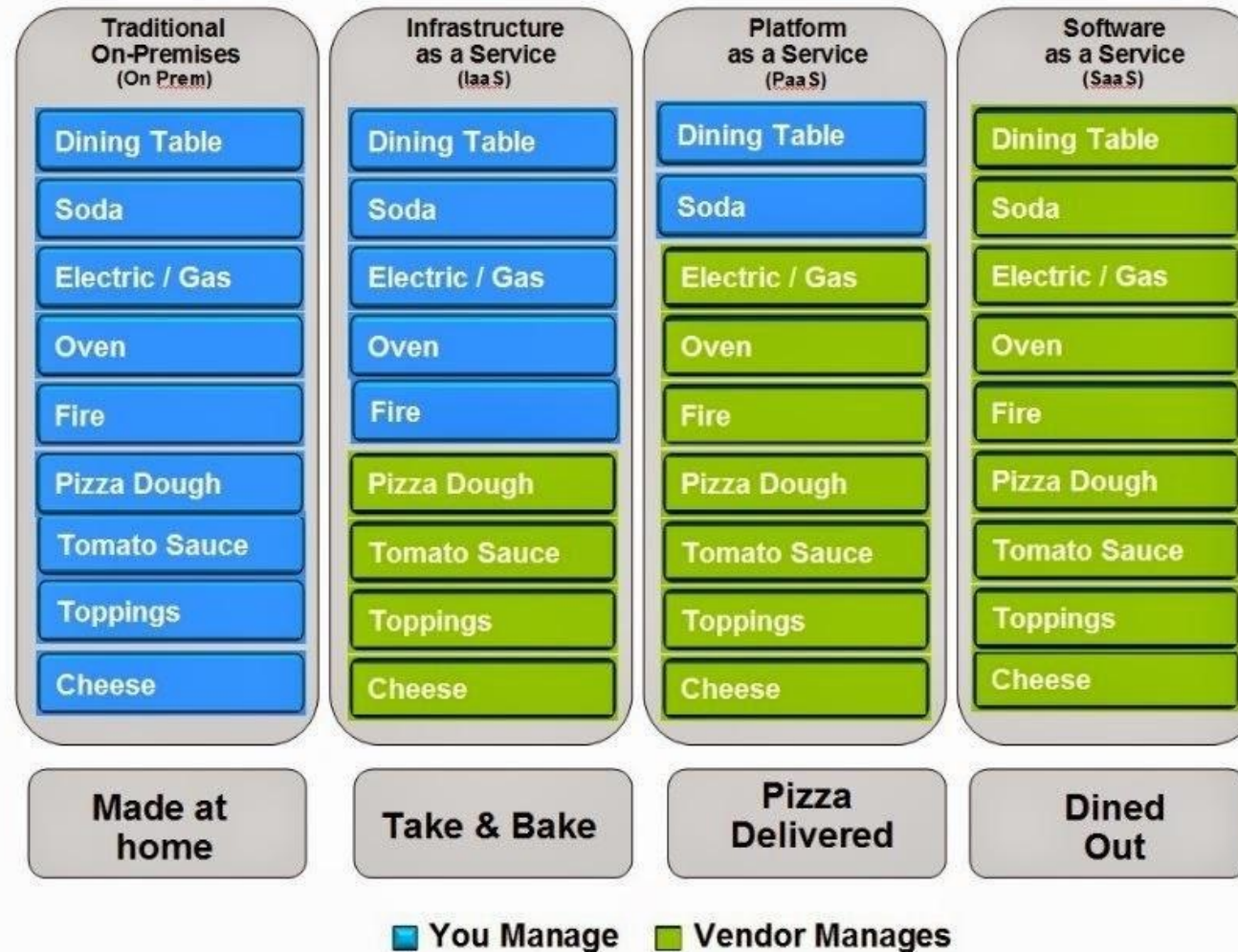
The core idea behind Anything as a Service business models is that businesses can cut costs and get specific kinds of personal resources by purchasing services from providers on a subscription basis.



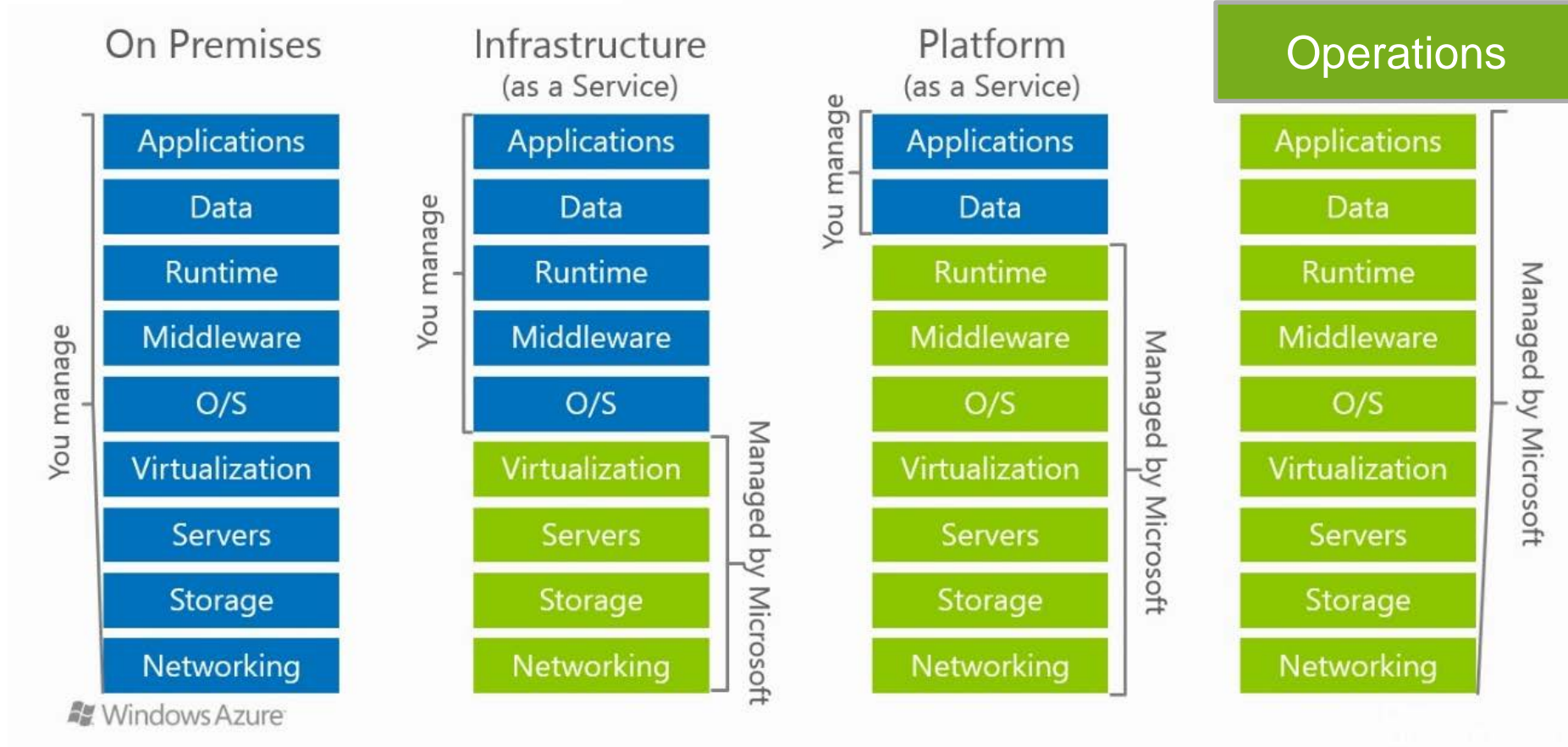
Attributes

Software as a Service	
Low Up Front Costs	✓
Usage is Scalable	✓
Automatic Patches, Upgrades + Updates	✓
Fully Redundant Platform For Reliability	✓
Per User Model For Easy Budgeting	✓

Pizza as a Service



Operations as a Service



“as a Service” in this presentation means a purchasing operations services within a single contract for a monthly subscription fee,

which leads to the second part of the definition...

Operations: TSMO systems and staffing within a Freeway TMC

INCLUDED

CORE

- TMC Operators
- ATMS SaaS
 - Admin & Maint
- Data Management
- Reporting/Analysis

OPTIONAL

- Asset Management
- Subscription Data

DESIRABLE

- ATMS Operating Environment
- ATIS
- Video Management
- Road Closure
- Dispatching

TMC

FIELD

EXCLUDED



- Bridgeport, CT
- I-81 Corridor
- Virginia Statewide Outsourcing

Is outsourcing sufficient? Why take the extra step of Operations as a Service?

Outsourcing versus as a Service

Outsourcing

- Manage day to day
 - TMC staffing
 - Systems project delivery
- Payment based on hours worked for operations and features delivered for systems
- Rigid contract timeframes
- More control of process

as a Service

- Define and monitor operations service levels and performance measures
- Pay for outcomes
 - Subscription payments start when services are rendered
- More flexible subscription time frames
- Less risk of paying without results



- Better use of DOT staff – allow DOT to focus on core business
- Reduced effort managing multiple contracts
- Reduced life cycle costs for TMC operations and systems
- Eliminates problems with poorly aligned job classifications with traditional agency positions
- Leverage broader knowledge base – Operations vendor has financial incentive to draw on national and international experience to improve efficiency
- Potential use non-DOT buildings
- Simplified HR processes
- Increase efficiency
- Reduce risk

Potential Drawbacks

- Management
- Quality Control
- Budget Allocation



Mike Haas

IBI Group

mike.haas@IBIGroup.com

(503) 747-8352

THANK YOU



- Q27. What additional types of staff resources (or staff knowledge and skills) are needed to support your TMC's missions in light of the emerging technology and information applications? Question 27 asks each agency on the expected staff and skill needs in supporting TMC operations from new technology and tools perspective. The common needs identified by the TMCs include: IT related skills, such as network/database management System engineering, in system integration, maintenance and operations ITS design and traffic engineering Additional staff for more coverage/capacity Training and continuing education, including, new technology training, network hardware training, systems training from vendors Funding

We use "as a Service" stuff every day



SaaS

PaaS

