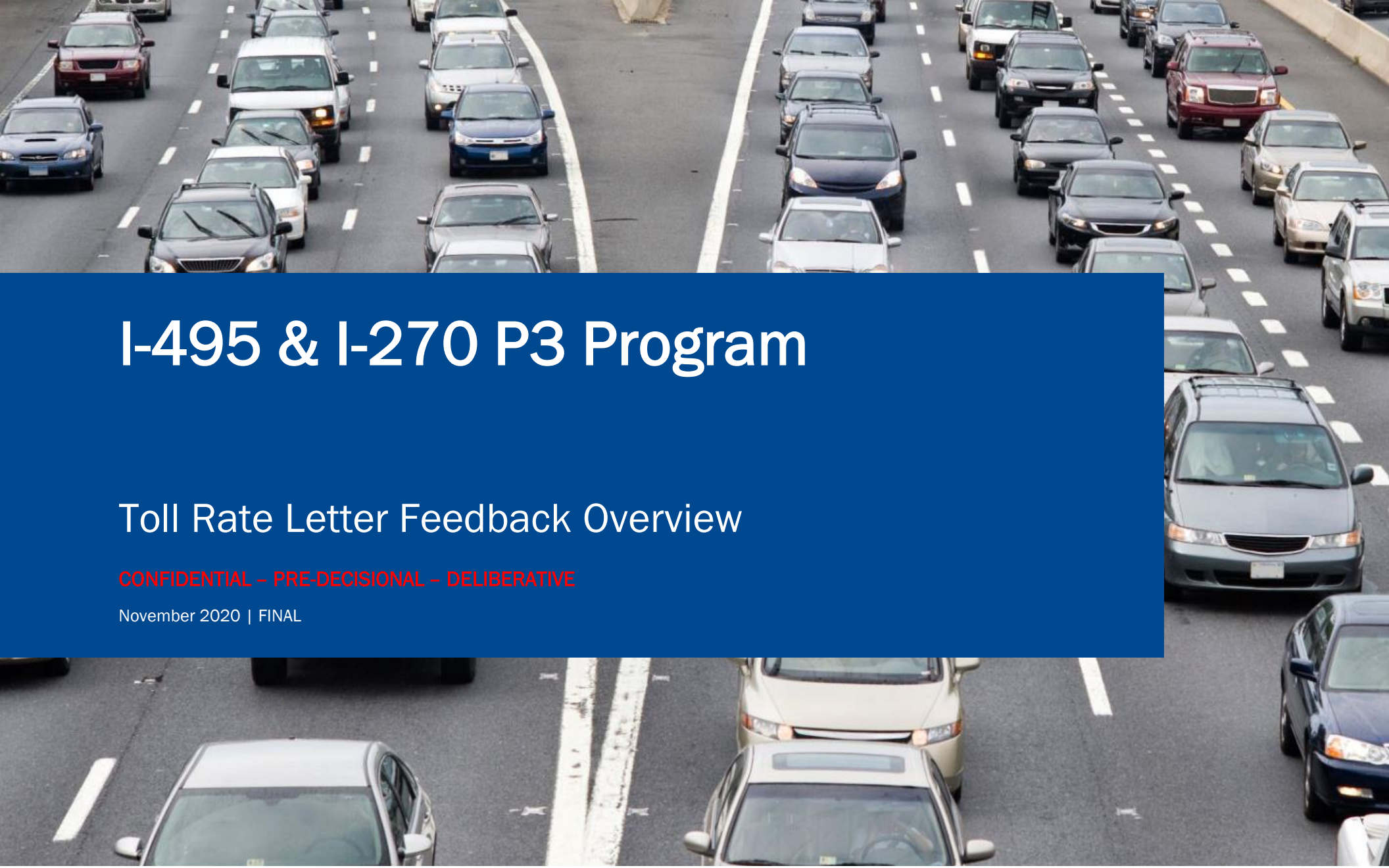

I-495 & I-270 P3 Program

Toll Rate Letter Feedback Overview

CONFIDENTIAL – PRE-DECISIONAL – DELIBERATIVE

November 2020 | FINAL

495 270 P3 PROGRAM

MARYLAND DEPARTMENT OF TRANSPORTATION

MDTA

November 4th Letter to Potential Developers

- Letter with preliminary toll rate information sent to bidders on November 4th with two-week feedback timeline
- Letter contents
  - Minimum Toll Rate

Base Rate:	$0.20 per mile (2021$) 2-axle ETC
Escalation:	Annual CPI

  - Maximum Toll Rate

Base Rate:	$3.76 per mile (2021$) 2-axle ETC
Escalation:	Annual CPI, annual 2.1%

  - Soft Cap

Base Rate:	$1.50 per mile (2021$) 2-axle ETC
Escalation:	Annual CPI, annual 2.1%
Thresholds:	Traffic volume greater than 1,650 PCEphpl and speed less than 50 mph
Mechanism:	Series of demand factors to multiply by the previous soft cap if thresholds are met
Frequency of Change:	Every 5 minutes

Overview of current process

- Feedback received from three bidders on November 18th
  - Accelerate Maryland Express Partners (AMEP)
  - Accelerate Maryland Partners (AMP)
  - Capital Express Mobility Partners (CEMP): CEMP provided estimated revenue impacts for most of their feedback
- The nature of the feedback was within MDTA expectations. While several changes were suggested by the bidders, there was no indication that the preliminary toll rate information as provided on November 4th would lead to concerns with the overall viability of the project
- Feedback is described in subsequent slides
- The state would receive the greatest value by incorporating changes we agree with into a response letter for the bidders. **Letter would need to be sent with enough time for bidders to incorporate the changes into their analysis**
- Other changes can be made and value can still be achieved through negotiations after the selection of the Phase Developer

Feedback from Bidders

- Summary of comments received in table below
- More detail, including our recommended actions, is provided in later slides

Toll Rate Element	# Comments	# Fully or Partially Accepted	Nature of Comments
Minimum Rate	0		
Maximum Rate	0		
Escalation	3	0	Comments were (1) additional congestion-based and (2) HOV3+ share-based escalation and (3) change to CPI measurement
Soft Cap Rate	2	TBD	2 comments for higher soft cap
Soft Cap Threshold	4	4	2 comments to lower volume threshold, 2 to use “or” with volume/speed thresholds instead of “and”
Soft Cap Mechanism	7	5	2 comments on how to measure thresholds, 1 on more Phase Developer flexibility, 1 for additional information, 1 comment on alternate demand factor approach, 2 on toll rate interval
Classification	2	1	1 point of clarification, 1 comment on 2-axle small vs. large classes
Other	2	2	1 for additional information on PCE, 1 related to Tolling Services Agreement

Escalation (3 comments)

1. (AMP) Recommended a growth of congestion index be added to the toll rate escalation factors
   a. Our response: No change
   b. Reason: We considered growth of congestion over time in our analysis already. The way we described the escalation being made up of population, employment, and per capita income growth may have opened us up to this comment.
2. (CEMP) Recommend changing the CPI used in escalation calculation to an annual average instead of single month
   a. Our response: No change
   b. Reason: CEMP described that this change would reduce volatility, but the volatility described is not observed in historical data
3. (AMP) For applicable alternatives, recommend accelerating toll rate growth if the HOV3+ share increases.
   a. Our response: No change
   b. Reasons: Adding an HOV3+ related escalation factor would be difficult to incorporate. No suggestions were given by AMP on the mechanism for this. Our analysis shows only moderate changes in toll rates for much higher HOV3+ usage

Soft Cap Rate (2 comments)

1. (AMP) Recommended $2.00 per mile soft cap instead of $1.50 per mile
   a. Our response: TBD (see note below)
   b. Reason: As AMP indicates, our analysis shows a $1.50 per mile soft cap would be hit frequently on parts of Phase 1 South. Based on our analysis, the $1.50 per mile rate would offer drivers more protection from higher rates but would be hit more frequently and would have a small negative impact on revenue versus $2.00 per mile. A $2.00 soft rate cap would have minimal if any impact on the average toll paid by customers
2. (AMEP) Implicitly recommended a higher soft cap
   a. See #1 above

- DES Note: When drafting the initial letter to the Proposers, strong consideration was given to a soft rate cap of $2.00. We opted to include $1.50 to avoid giving to the $2.00 level if not needed.

Soft Cap Threshold (4 comments)

1. (CEMP) Recommended providing flexibility to develop the specific speed and volume thresholds periodically after opening when the actual speed-volume relationships can be observed. Recommend volume threshold between 1400 and 1650 PCEphpl and speed between 50 and 55 mph.
   a. Our response: Partially accept/make change
   b. Reason: We lowered the volume threshold to 1600 in response to this and the next comment. Other potential changes to the soft cap threshold and mechanism may be discussed with the Phase Developer after selection.
2. (AMP) Recommended lowering soft cap volume threshold to 1450 PCEphpl
   a. See response and reason for #1 above
3. (AMP) Recommend exceeding soft cap if volume is over threshold or speed is below 50mph (“or” instead of “and”)
   a. Our response: Accept/make change
   b. Reason: We agree this should be “or” to allow the Phase Developer maintain the minimum required speed during to unique events that cause lower speed but may not increase volume to the threshold
4. (CEMP) Same as #3 above

Soft Cap Mechanism (7 comments)

1. (AMP) Recommended soft cap mechanism be tied to segments of the road, potentially for each pricing segment, rather than individual gantries.
   a. Our response: Partially accept/make change
   b. Reason: We used “gantries” to describe the soft cap measurement locations. We changed this to more generically say “segments” (area between entry and exit points). After reviewing this feedback, we wouldn’t want the Phase Developer to pick gantry locations based on where it would be best to measure for the soft cap.
2. (CEMP) Recommended gantry-based speed and flow measurement be replaced with measurement on one-mile stretches along the highway which would trigger the ability to raise rates at gantries immediately upstream
   a. See #1 above
3. (AMP) Recommend that the operator determine the soft toll rate cap demand factors
   a. Our response: No change
   b. Reason: We will have to approve specific demand factors in our toll rate setting process

Soft Cap Mechanism (7 comments)

4. (AMEP) Asked that speeds be included in demand factor table
   a. Our response: Accept/make change
   b. Reason: Minor update to letter
5. (CEMP) Recommend alternate Demand Factor approach to allowing to charge up to 15% above the soft cap on the first instance of trigger and raising this an additional 15% to 30% if the situation persists after 10 minutes
   a. Our response: No change
   b. Reason: This approach is inconsistent with how the soft rate cap is envisioned to function and results in a backdoor increase in the soft rate cap.
6. (AMP) Recommend more flexibility in the toll rate interval than specifically once every 5 minutes. Recommend that the operator determines the optimum update interval.
   a. Our response: Accept/make change
   b. Reason: Our intent was to say “at most once every 5 minutes”
7. (AMEP): Same as #6 above

Classification (2 comments)

1. (AMEP) Asked for more information on 3 and 4-axle light vehicles
   a. Our response: Accept/make change
   b. Reason: Minor update to letter
2. (CEMP) Recommend dimension-based truck classification so oversized two-axle vehicles could be charged more
   a. Our response: No change
   b. Reason: Charging more for oversized two-axle vehicles would be inconsistent with MDTA's messaging regarding differentiating light/heavy vehicles and the relationship between higher tolls charged to vehicles with a greater impact to the infrastructure (e.g., pick-up truck towing a trailer vs. dump trump). The same impact does not exist with varying sized two-axle vehicles, except for motorcycles which have a separate classification.

Others (2 comments)

1. (AMEP) Asked for definition of “PCE”
   a. Our response: Accept/make change
   b. Reason: Minor update to letter
2. (AMEP) Asked for information related to Tolling Services Agreement
   a. Our response: Accept/make change
   b. Reason: Toll Services Agreement was made available to bidders on November 20