



## MINNESOTA DISTANCE BASED FEE

### TECHNICAL ADVISORY COMMITTEE *VIRTUAL MEETING*

DECEMBER 9TH, 2020

#### Minutes

Start: 1:00 pm

Adjourn: 2:30 pm

#### **Present:**

##### **TAC Members**

Margaret Donahoe

Nick Thompson

Kathleen Mayell

Emily Murray

Bill Dossett

Dawn Hood

Russ Stark

Glenn Kleven

Tony Anderson

Scott Peterson

Paul Weinberger?

Shawn Kremer?

Brendan Jordan?

##### **Core Team:**

Meredith Benesh

Ken Buckeye

Camila Fonseca-Sarmiento

Joe Loveland

Frank Douma

Raihana Zeerak

Lee Munnick

Jerry Zhao

Serge Phillips

Tim Sexton

Adeel Lari

Ray Starr  
Erik Rudeen  
Tim Sexton  
Chris Berens

**WSP:**

Mike Warren

**Minutes:**

- Scott Peterson - opening remarks
  - Distance based fees will need to be part of the conversation moving forward
  - Walz and Biden have shown support for EV credits and subsidies
  - Scott will be retiring a week from Friday!
    - He's done a lot of interesting and exciting things in his time here. Including DBFs! It is hard to walk away when so much is happening
    - Scott will stay on as the chair of the TAC through its completion
      - End of June
      - Hopefully we get to meet in person by then!
  - Last time we talked about modal equity, and we'll continue that today.
  - We'll also move on to Social Equity
    - A very important discussion!
  - Any Questions?
- Ken - Do we need to approve minutes?
  - Scott asks if everyone had a chance to review minutes and has any questions or concerns
  - Tony Anderson moves to approve minutes
  - Russ Asks in chat: are we a voting body that would vote on things like improving minutes?
- Lee - Meeting/Zoom Guidelines
  - We'd like to mimic a real-world meeting where possible with a center table with TAC members and staff on the outside
  - Raise your hand to ask a question
  - Add questions or comments to chat box
  - Meeting is not being recorded, but chat box comments will be saved
- Ken
  - Thank you, Scott, for continuing on as the chair of this group!
  - Dawn Hood is replacing Laurie McGinnis as the CTS representative due to Laurie's retirement in January
  - Thank you to HHH for hosting the meeting
  - Please let us know if there is anything you are unhappy with regarding these meetings
  - Please take a look at the new DBF MnDOT website

- Lots of information there!
  - Please let us know if you have any comments
  - There is a tab for TAC meetings with relevant information
- Ken - Agenda
  - See agenda
  - Demonstration update from Mike Warren will come later in the agenda
- Frank - Review of modal equity discussion and survey summary
  - We discussed modal equity last time, we'll discuss social equity today
  - Purpose of topic discussion
    - Articulate issues
    - TAC to provide guidance and advice on policy issues
    - We are not seeking resolution on these issues from the TAC. Not looking for recommendations on how to resolve these issues.
      - Policy will be handled by the legislature
  - Review of Modal Equity
    - Discussed factors including vehicle weight, powertrain, shared mobility
  - Follow up survey results from last TAC Meeting on Modal Equity
    - Damage to roadway system is most important consideration (vehicle weight)
      - Congestions and environmental costs were also important factors
    - Majority of respondents felt DBF should incentivize EVs
    - Noted that social impacts will also need to be considered
      - We'll talk about that today
  - Comments on modal equity white paper and edits
    - Specified what "user fees" were
    - Added introduction to explain the context of the memo
      - This is one of several memos
      - Contribute to policy discussion
    - Removed literature on transit as it was out of the scope of the demonstration
    - Changed terminology from "road damage" to "damages to the roadway system" to capture pavement and bridges
  - Any questions?
    - none
- Adeel Lari - Social Equity
  - Most people believe tax system should be just, fair and equal
  - Look at two principles
    - Benefits received
      - Drivers pay for the benefit received from using transportation system
    - Ability to pay
      - Horizontal Equity
      - Vertical Equity
        - Amount of tax paid increases with income earned

- If tax is based on ability to pay, then it is progressive tax policy
  - Good tax should be
    - Fair and equitable
    - Transparent
    - Easy to collect
- Social equity really became popular during the 1960s
  - Societies have always treated different groups inequitably
- Social equity in transportation is a relatively new concept
  - Equal vs equitable
    - Does everyone drive a 4 door sedan or do they drive what is appropriate for their trip?
- Men vs Women
- Low income people
- Externalities of transportation
  - Effects different populations differently
- Motor fuel tax
  - OR was first state to implement gas tax
  - Hoover implemented first national fuel tax
    - MN fuel tax is 28 cents per gallon
  - Gas tax was originally based on user pays concept
    - It was originally equitable
    - Changes in fuel efficiency of vehicles has eroded the equity of the fuel tax
      - Poorer families own lower efficient vehicles and thus pay more
      - Fuel tax now has horizontal and vertical equity issues
        - Adeel considers it regressive at this point
- Motor vehicle sales tax
  - Based on value of vehicle
    - Those who buy a more \$\$\$ vehicle, pay more in taxes. Ability to pay is considered in this.
      - MVST is considered progressive in this sense
- Vehicle registration fee
  - Most progressive as it increases with value of vehicle
- Wheelage tax
  - Levied by MN counties, 10-20 dollars
    - Since it is fixed, it is regressive
- Local Option sales tax
  - Counties can levy of 0.05%
    - Mostly regressive as low income people pay more of their income to sales tax
    - Not as regressive in MN because food and clothes are exempt
- HOT Lanes
  - Higher income families use these lanes more frequently

- Families with higher income benefit more from HOT lanes in MN
  - Lower incomes benefit by using lanes when it was most important
  - Benefit to transit and reduction in congestion make HOT lanes more progressive
- TNCs
  - Product of dense urban population
  - Literature has ID serious issues with equity with TNCs
    - Older people use less
    - More education and affluent use twice as much as less education and poorer
    - More frequently used in densely populated areas, less in suburbs and don't exist in rural areas
  - Taxes and licensing
    - Various municipalities apply different
    - Can have negative impact on women who take more frequent and shorter trips
    - Safety issues also impact women
- DBF
  - A deployment of a flat rate is likely to be more progressive than the gas tax
  - Higher income = higher VMT, so wealthy people will pay more
  - DBF could be made more progressive
    - Adjustments for time of day would benefit women
  - Tribal Nations
    - Consultation with tribes would be necessary in order to develop an equitable DBF for them
- While this is a technical study, we still need to keep equity front of mind
- Cost of collection is regressive
- Questions and Discussion
  - Ken - clarifies that we are only using a flat fee in the demonstration as a means to simplifying the calculation
    - We are considering if there should be a variable rate
    - Rep Elkins bill accounts for EVs by applying a comparable ICE vehicle
    - A lot of discussion is still necessary to determine rates or series of rates
    - We need the thoughts of the TAC on this
  - Adeel -
    - Fuel tax is regressive as it is not based on ability to pay
    - DBF will also be regressive
  - Margaret
    - Memo needs to clarify that there is not just a tax on fuel, we also have a tax on alternative fuels. This often gets forgotten
    - Electricity is really the only one that isn't taxed

- Legislature provided an annual EV registration fee in lieu of this.
  - The memo needs to address this
- How much difference is there in terms of MPG between older and newer vehicles?
  - It would be helpful to compare a 2020 vehicle vs a 2000 vehicle, for example. We need to know what the difference is. It would help the discussion to understand this difference.
  - It would be helpful to know what percentage of people's income is paid towards these taxes
    - The average person thinks they pay a lot
  - Travel patterns of women seems outdated at this point
    - Is there more recent data?
- Ken
  - There is actually a fairly low difference in fuel economy between different types of passenger vehicles, to Margaret's point.
- Dawn
  - Response to women's travel patterns
    - We could use caretaker/caregiver
    - More recent data on women's travel behavior would be helpful
      - Adeel - yes there is a lot of this information!
- Ken
  - We can pull the numbers together about how much the average person pays in fuel tax
  - Adeel - important to put it in context of what percentage of their income it is
- Russ
  - Analysis on gender seems a little dated and could be more robust
  - Relative impacts of vehicle ownership
    - Higher income houses purchase higher income vehicles
    - Wouldn't consider the MVST a progressive form of sales tax, due to the higher burden of vehicle ownership
- Kathleen via chat: I agree that adding more of the data to the memo would help inform next steps with DBFs.<sup>[P]</sup><sub>[SEP]</sub>
- Serge
  - It would be helpful to see an average of taxes paid by vehicle type as well - e.g. small cars vs pick ups
  - In relationship to the revenue generated
  - Frank - Camila has some data on this that we can double check
- Lee
  - Question about Revenue department data that is collected about tax amounts and its regressivity

- Glen - we'd likely have to make that request for our research
      - Fuel tax is collected at the wholesale level so it is hard to drill down to the user level
      - If we have a better articulated question, Glen can send it to the research unit
    - Lee is talking about a report put together by revenue department on regressivity
      - Total burden is important to consider, not just individual level
    - Jerry
      - Knows the report Lee is talking about! He will put it in the chat and see if it has fuel tax in it.
      - [https://www.revenue.state.mn.us/sites/default/files/2019-03/%2B2019\\_tax\\_incidence\\_study\\_Nolinks\\_0.pdf](https://www.revenue.state.mn.us/sites/default/files/2019-03/%2B2019_tax_incidence_study_Nolinks_0.pdf)
      - The Revenue Department's 2019 Incidence study in Jerry's link above shows tax incidence tables for Sales Tax on Motor Vehicles (p 121), Motor Fuel Excise Taxes (p. 123), and Motor Vehicle Registration Tax (p. 133). All three taxes are regressive in this study.
  - Scott
    - Does regressivity come in to play when you're talking about user fees vs taxes?
      - User fees are intended to capture the full value of the service
      - We need to delineate what we're talking about here
  - Russ
    - Counterintuitive pairing of EV benefits and road damage in survey results
      - Logical to layer a distance fee on top of a fuel tax
      - Margaret - weight-distance tax might be a good solution as some states have in place
  - Frank
    - This is complicated!
    - It may not be that there is perfect rate setting solution to capture all issues that we're discussing
  - Glen
    - Simplicity is important in collection!
      - Every variable that we add makes it harder for the taxpayer to pay the right amount and for the state to collect the right amount
  - Chris
    - How much complexity are you willing to accept to pursue some desired outcomes?
    - Important to dust off some of our assumptions
    - If you embrace complexity, you meet challenges in terms of full implementation
  - Scott





income communities and communities of color. There is interest in mitigating those effects through future investments.

- Ken
  - Please use the survey you will receive to add additional feedback!
  - Please offer comments and feedback to Adeel on his social equity memo
  - Any other closing thoughts on this discussion?
    - Margaret
      - In terms of different populations - rural vs urban areas is bound to come up!
        - We have a memo on this and will have a discussion in future meeting
        - This is the reason Adeel did not include this in his memo
      - Topics forthcoming
        - Urban vs rural equity
        - Administrative efficiency
        - Privacy
    - Chris
      - Key takeaway from this discussion - the overarching “parent” question is: whether or not to think about a DBF as a traditional tax or as a user fee
        - This will be a key decision for Minnesota! And other states.
          - Should it be a simple fee or should complexity be embraced?
- Mike - Demonstration Update
  - Great discussion in this meeting so far!
  - All demonstration data has been collected through the end of October
  - We are transition phase between stage 2 and 3
    - Stage 2: Shared mobility (SM) provider is now creating their own revenue reports, sending to WSP and, then they go to revenue
    - Stage 3: SM providers will send revenue report directly to revenue
    - There will also be a mock audit as part of stage 3
  - By the numbers
    - Over 300,000 miles driven
    - 61 total vehicles
    - 11,000 gallons purchase
    - 31.5 mpg on average
      - This is a little higher than the national average right now
      - There are some hybrids and 4-cylinder sedans in these SM fleets
    - Two SM providers
      - Hourcar
      - Zip car
    - Total net DBF assessed
      - 1.6 cent per mile for state rate
      - Xxxx for federal rate

- \$4227.12 simulated net total DBF assessed
- Monthly averages
  - 50k miles per month average for both providers
  - 1500 gallons purchased
  - \$1333 gross dbf
  - \$603 net dbf
    - \$344 state
    - \$257 federal
  - July was peak month for miles traveled
- C/AV testing
  - VSI labs - local C/AV research company based in St. Paul
  - November 5th - first test
    - Vehicle in level 3 automation
    - Collecting data, putting data in repository, and collecting a simulated DBF
    - This is the first test of its kind among all states!
  - Other tests with VSI
    - HOV lanes
      - Which lanes is the vehicle travelling in?
    - Vehicle occupancy
      - How many people are in the vehicle
- Rate setting workshop
  - Facilitated by WSP
  - Used this to start identifying how we could assess a DBF
    - What criteria should we consider
    - What are the overarching goals and vision of a DBF?
  - Established how we could establish a base rate
    - Road damage
    - Environmental factors
    - Administrative costs
  - Adjustment factors
    - Congestions
    - Quality of life
      - Noise level, safety
    - Type of vehicle
    - Private vs. public use
    - Socioeconomic factors
  - There is no gold standard or rule book for how this is implemented
    - Each state does it differently
- Additional demonstration activities
  - Breadcrumb data has been turned on for SM providers
    - Captures location and time of day information
    - Could inform congestion pricing schemes
    - Need to be very careful of privacy here

- Data needs to be sanitized to not reveal any PPI
  - MnDOT fleet telematics data
    - There is not thing as too much data!
    - All Mndot vehicles have ability to capture mileage data, location of travel, speeds, etc
    - Can this telematics solution be applied in other ways?
  - Next Steps
    - Stage 3 of SM revenue report
    - Mock Audits of SM data
      - How would we audit this in a real-world scenario?
    - Demonstration wrapped up at the end of March
    - Data mining and analytics will continue
    - Document findings in final demonstration report at the end of May, 2020.
  - Ken -
    - Important reminder! This demo is unique as MnDOT has not installed any hardware to these vehicles. We are using technology that already exists in SM provider vehicles in order to do carsharing
      - There could be great gains in efficiency with this method!
    - Most other demonstrations and deployments around the country have implemented flat rates
      - This is in an effort to get these programs or demonstrations launched. They have not dived into the complexities that we discussed today.
- Ken
  - Rethinking Transportation Roundtable held in November
    - Recording is available! Meredith will distribute it
  - We will be meeting in March for our next meeting
- Scott
  - Thank you for participating and actively engaging in the discussion today!
  - Nice to see you and see you next time!
- Ken
  - Don't forget about the survey!