

CATEGORY 2 WORK GROUP METROPOLITAN (TMA) MOBILITY

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RECOMMENDATIONS REPORT, FUNDING DISTRIBUTION EQUATION, AND MPO GEOGRAPHIC DISTRIBUTIONS

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TxDOT Executive Management
and the
Texas Transportation Commission



Prepared by
Texas Transportation Institute



In Cooperation with the
Texas Department of Transportation

REPORT ORGANIZATION

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EXECUTIVE SUMMARY

The Category 2 work group met on July 22-23 to reconsider the funding distribution equation which was developed in year 2003. This equation has been used by TxDOT to make distribution of Metropolitan Mobility funds since that time. In addition to use of the existing seven variables of the year 2003 equation, the TxDOT Administration recommended consideration of the following issues:

- Addressing existing congestion
- Population extremes among the eight TMAs (creating separate pots of funding for the larger and the smaller TMAs)
- Time value of money for delayed projects.

Work group members reached consensus to include an element to accommodate a congestion factor.

The work group decided against creation of separate pots of funding determined by metropolitan region population as sub-categories of Category 2.

Discussion of the Unified Transportation Program (UTP) planning process led to consensus that a process similar to the “Trade Fair” should be re-initiated. An improved process should include accountability for overruns between original allocation of funds and final construction costs. The Work Group also recommended that the programming and letting process should be designed to prevent penalizing one MPO area because another MPO area was allowed to advance a project during times of limited funding. The group also concluded that projects which were allowed to advance in time were done so due to other projects not being able to let on schedule, thus no financial burden should be placed on the projects let in advance, and no benefit should be accrued by the projects which were delayed due to their development problems. It was concluded that no projects have voluntarily been delayed by one District in order for other Districts to advance their projects. In the event that this situation should occur in the future, the work group recommended consideration of a financial incentive to accommodate inflation costs for the volunteer-district project.

The work group also considered the need and appropriateness of the year 2003 factors and their respective weight value in the equation. The final equation includes all previous factors except the centerline miles factor. A congestion factor has been added.

The final equation inputs recommended by the workgroup are compared with the existing equation (years 2003 – 2007) in the following table.

Basic Equation Element/Variable	New Recommendation	Old Equation (2003-07)
Census population	17%	22.19%
Population below poverty level	7%	6.88%
Fatal and incapacitating crashes	7%	6.56%
Total VMT (on and off system)	30%	32.50%
Lane miles	10%	16.88%
Truck VMT	14%	14.06%
Centerline Miles	0%	0.94%
Congestion	15%	0.00%

Due to lack of available current demographic data at the meeting, the Work Group was unable to determine the percentage of funds that would go to each individual MPO at that time.

The Work Groups did set the policy for determining their individual percentages by stating that these would be computed from demographic data based on the Metropolitan Area Boundary (MAB) of the MPO. In other words, the MAB demographics would be used as the geographical basis for funds distribution. The MAB is generally defined as the area that includes the Bureau of Census Urbanized Area plus an area expected to be the growth area for the next twenty to twenty-five years. Each MPO has a MAB approved by their Policy Committee and agreed to by TxDOT or the Governor.

More specifically, the MABs are to be used as they exist at the time of funds availability and distribution. It is likely that at least some of the MABs will be changed between the 2008 Work Group meeting and the point in time at which funds become available.

The 2003 -2007 equation had been calculated by TxDOT in a similar manner except that the demographic data used for each MPO was based on the Census Metropolitan Statistical Area Boundary (MSA). The MSAs included several counties entirely outside of the MABs as well as many portions of counties which were outside of the MPO MABs. Furthermore, each of the MSA counties was previously included in its entirety in the distribution equation, regardless of whether it included any portion of the MAB or not. This was not the intention of the original work group (and in a few cases had significantly affected the past distributions).

During the Work Group meeting, each individual MPO made guesstimate adjustment to their old data (dropped out non-MAB counties and guessed what % of the partial counties previously used would drop out of their numbers) which had been used by TxDOT staff . Various scenarios were then tested by varying the percentages for each of the seven elements to compare outcomes on individual MPOs. The various scenarios tested are shown in Appendix E of the Meeting Notes which is a part of the Report. These scenarios, of course, vary somewhat when compared to the final demographically calculated percentages.

The formulas compare the relative percent of each parameter in each metropolitan area with the total of all eight areas and then weight each parameter. For example: if the total population of one metro area is 1 million persons and the total population of the eight combined areas is 15 million, then the percent population for that one area is $1/15 \times 100$ or 6.7 percent. If the weighted importance of population to all the parameters is 17% then the contribution of population to the percentage distribution for the one area is $17/100 \times 6.7$ or 1.1%. This calculation is performed for each weighted parameter and then the weighted parameter calculations are summed to arrive at a percentage of 100% of the Category funds that would be allocated to that one area.

This is actually a simple process once the demographic data from the individual MPOs is determined. The demographic data would not require revision unless an MPO officially changes its MAB and has the revision approved by TxDOT or the Governor. This should also be a simple change once the system is set up.

The MPOs have, since the Work Group meeting, provided electronic shape files of their officially adopted MABs to TxDOT. Only those portions of counties which are covered by MABs are included when calculating new distribution factors. TxDOT also worked with all MPOs and the TPP Data Management Section for collection of individual MPO demographic data to be used in determining final percentages for a new distribution equation.

Each MPO's individual overall percentage of total distribution was later determined by multiplying their individual percentage of total for each element by the equation factors.

It is important to note that the new equation will be used at a point in the future when new sources of Category 2 funds become available. This equation does not affect the 2009 UTP.

The following table indicates geographic distribution to the eight TMA MPOs in Category 2 in accordance with the new equation and new demographic data chosen by the Work Group. The table also allows a comparison with the guesstimate distributions of the Work Group at the July 2008 meeting as well as comparison with the old 2003-2007 distribution percentages previously used by TxDOT.

MPO Area	New Distribution Percentages	Guesstimate Distribution Percentages at Work Group Meeting	Old Distribution Percentages Used by TxDOT 2003-2007
CAMPO	9.135%	9.065%	9.263%
Corpus Christi	2.683%	2.976%	3.292%
El Paso	4.060%	4.030%	4.661%
Hidalgo	4.077%	4.074%	3.806%
HGAC	33.941%	32.214%	29.502%
Lubbock	1.571%	1.703%	1.996%
NCTCOG	34.680%	34.166%	36.320%
San Antonio	9.853%	9.772%	11.159%
Totals	100.000%	100.000%	100.000%

Individual MPO demographic data used in calculating final percentages are shown in Appendix 1.

BACKGROUND

Workshop Purpose

The Category 2 work group was reconvened in July 2008 in accordance with a recommendation made in 2003, when the first Category 2 work group met. The 2003 recommendation was that the workgroup meet again and analyze the process and consider potential changes five years after its inception. This activity fulfills a desire to keep the process dynamic with changing circumstances affecting transportation project programming for the TMAs.

Work Group Composition

Each TMA and corresponding TxDOT district had one voting member on the work group. The voting members were:

- Austin MPO – Joe Cantalupo (Director)
- Austin District – Ed Collins (Advance Transportation Planning Director)
- Corpus Christi MPO – Tom Niskala (Director)
- Corpus Christi District – Craig Clark (District Engineer)
- Dallas-Fort Worth MPO – Michael Morris (Director)
- Dallas District – Brian Barth (TPD Director)
- Fort Worth District – Bill Riley (TPD Director)
- El Paso MPO – Roy Gilyard (Director)
- El Paso District – Gerardo Leos (APD Engineer)
- Hidalgo County MPO – Andrew Canon (Director)
- Pharr District – Robin Boone (Planning Engineer)
- Houston-Galveston MPO – Ashby Johnson (Deputy Director)
- Houston District – Gabriel Johnson (TPD Director)
- Lubbock MPO – David Jones (Director)
- Lubbock District – Steve Warren (TPD Director)
- San Antonio MPO – Jeanne Geiger (Deputy Director)
- San Antonio District – Mark Mosley (Program Engineer)

2002-2003 Work Group Efforts

All eight TMAs and corresponding TxDOT districts participated in the 2002-2003 workgroup sessions. Each TMA and district had one voting member on the workgroup, varying between policy committee members and staff. The workgroup met several times in late 2002 and early 2003 in Austin to discuss and consider various factors that could be elements of an equation through which Category 2 funds would be distributed to the TMAs.

The 2003 equation included the following factors and weighted values:

- Truck VMT (14.06%)
- Population (22.19%)
- Centerline Miles (0.94%)

- Lane Miles (16.88%)
- Fatal and Incapacitating Injury Accident Crashes (6.56%)
- Percent Population under Federal Poverty Level (6.88%)
- Total VMT (32.50%)

It is important to note that the workgroup did not intend to include centerline miles in the formula. The final round of voting on the weighted values was conducted by e-mail and voting members were supposed to provide their preferred weighting percentages for each of the other six criteria. One of the voters included centerline miles with a weighted percentage and it was included in the overall votes when TPP calculated the final weighted values (using the averages of percentages submitted by each voter) for each criteria. The single vote for centerline miles is evident by the extremely low percentage (0.94) it was assigned.

USE OF 2003 DISTRIBUTION EQUATION

TMAs

In accordance with the recommendations of the previous Category 2 work group, TxDOT began using the equation to distribute Category 2 project programming funds to TMAs in 2003. TxDOT will continue to use the 2003 equation until a time at which the Texas Transportation Commission approves a new formula.

Counties Included in Distribution Geography

TxDOT used metropolitan statistical area (MSA) boundaries resulting from the 1990 census when distributing Category 2 funds, beginning in 2003. The 2003 Category 2 work group did not recommend this policy and there is no documentation explaining why the 1990 MSA boundaries were used. According to comments at the 2008 work group meetings, the participants anticipated that metropolitan area boundaries (MABs) would be used to distribute the funds. The work group also made a recommendation that MABs be used in the equation they have developed.

MSA boundaries are determined in a process separate from MAB designations. MABs are typically the smoothed urbanized area plus areas anticipated to be urbanized within 20-25 years. Furthermore, each of the MSA counties was included in its entirety in the distribution formula, regardless of whether they included any portion of the MAB or not. Table 1 includes a list of the counties included in the 2003 distribution. Discrepancies between the MSA and MAB counties can be observed by the omissions of a county in the “2000 MAB Counties” column that was included in the “1990 MSA Counties Included” column. Extra MSA counties were included for the Austin, Dallas-Fort Worth, and San Antonio TMAs. All counties that were in the MABs in 2000 were also in the corresponding MSAs in 1990 – no counties were excluded from the formula that should have been included.

Table 1. Counties Included in 2003 Category 2 Funds Distribution

TMA	1990 MSA Counties Included	2000 MAB Counties
Austin	Hays	Hays
	Travis	Travis
	Williamson	Williamson
	Bastrop	
	Caldwell	
Corpus Christi	Nueces	Nueces
	San Patricio	San Patricio
Dallas-Fort Worth	Collin	Collin
	Denton	Denton
	Ellis	Ellis
	Johnson	Johnson
	Kaufman	Kaufman
	Rockwall	Rockwall
	Parker	Parker
	Tarrant	Tarrant
	Hunt	
	Hood	
	Henderson	
El Paso	El Paso	El Paso
Hidalgo County	Hidalgo	Hidalgo
Houston-Galveston	Harris	Harris
	Montgomery	Montgomery
	Fort Bend	Fort Bend
	Galveston	Galveston
	Liberty	Liberty
	Chambers	Chambers
	Waller	Waller
	Brazoria	Brazoria
Lubbock	Lubbock	Lubbock
San Antonio	Bexar	Bexar
	Comal	Comal
	Guadalupe	Guadalupe
	Wilson	

2008 WORK GROUP EFFORT

Charge to Workgroup

The official charge to the 2008 workgroup was to review the previous distribution equation and determine if any changes should be made to it. The changes could include adding or deleting factors, as well as adjusting the factor weightings. In addition, there were three key points that the workgroup was asked to consider:

- Addressing existing congestion – the current formula does not have a congestion factor; the comment was “are you applying the funds responsibly to reduce congestion?”

- Population extremes among the eight TMAs – consider creating separate pots of funding for the larger and smaller Category 2 MPOs
- Time value of money – consider compensation or credit values for projects which are moved back in time of letting in order to let other projects ahead of schedule

The workgroup's considerations of these three key points are discussed in this section.

TTI Review of Category 2 Process

Texas Transportation Institute (TTI) staff made a presentation that reviewed the 2002-2003 Category 2 process. This review reminded those who were part of the 2002-2003 process what had transpired and how the formula they developed and recommended was used. The review also informed new members of the work group what the process was about and helped bring everyone to the same point of beginning for this effort. Veteran members were asked to share their experiences.

Process

As in the 2002-2003 workgroup sessions, the participants worked in a cooperative manner, recognizing the differences and needs of the various MPOs that are eligible to program Category 2 funds. Each TMA and corresponding TxDOT district had one voting member on the work group. While votes were taken on specific issues during the workshop, decisions were made by reaching consensus.

Key Point Considerations

Addressing Existing Congestion

The workgroup was asked to consider including congestion as a factor in the distribution formula because it was not included in the existing formula. Along with the specific key point, David Casteel (representing TxDOT Administration) emphasized while there are eight major metropolitan areas represented in the workgroup, they are all part of one state and should consider congestion statewide.

Tim Lomax, of the Texas Transportation Institute, made a presentation to the workgroup in which he offered a basic approach to consider congestion in the formula. He pointed out that it follows the same philosophy that was used in the mobility plans in recent years. The approach for considering congestion computes the VMT above a congestion threshold for each segment of road and then sums the VMT for a county or District. The congestion threshold is determined by either urban or rural and freeway or street. The congestion thresholds were based on TxDOT's Quality of Flow values and the Urban Mobility Report, both of which are simplistic approaches based on daily traffic volumes. The freeway data does include tollways, and the street threshold was based on the divided roadway volume per lane.

The basic concept is to calculate the amount of VMT above a given congestion threshold (using the same threshold for all areas) and use that amount of congested VMT for comparison. Lomax offered three congestion levels to consider:

- Serious (LOS F VMT; include VMT on roads operating worse than level of service E),
- Severe (a daily traffic volume per lane between LOS E&F), and
- Extreme (VMT on roads operating with volume per lane above LOS F).

Table 3 presents the congestion levels and thresholds by road class (defined by HPMS functional class number) and area type. The numbers in the “Serious,” “Severe,” and “Extreme” columns are the assumed daily volume per lane for each road and area type. The higher values in Table 3 were considered by the working group. These targets were seen as too congested enough to be useful as indicators of impending congestion.

Table 2. Congestion Targets by Level of Service and Road Type

Road & Area	HPMS FC Number	Extreme (LOS BAD)	Severe (LOS F+)	Serious (LOS F)
Urban				
Frwy	11,12	25,000	20,000	16,000
Street	14,16	10,000	8,000	5,500
Rural				
Frwy	01	15,000	12,500	10,000
Street	02,06	7,500	6,000	4,500

Table 3. Road Volumes by Level of Service and Road Type

Road & Area	HPMS FC Number	Serious (LOS F)	Heavy (LOS E-F)	Moderate (LOS E)
Urban				
Frwy	11,12	16,000	14,500	13,000
Street	14,16	5,500	5,000	4,500
Rural				
Frwy	01	10,000	9,000	8,000
Street	02,06	4,500	4,000	3,500

Table 2 presents two lower levels of congestion threshold considered by the working group.

Figure 1 provides a graphic example of how congested VMT is calculated using the congestion targets and associated traffic volumes. The VMT represented in the red portion of the bars (the portion above the threshold) would be used for the calculation of congested VMT in a region.

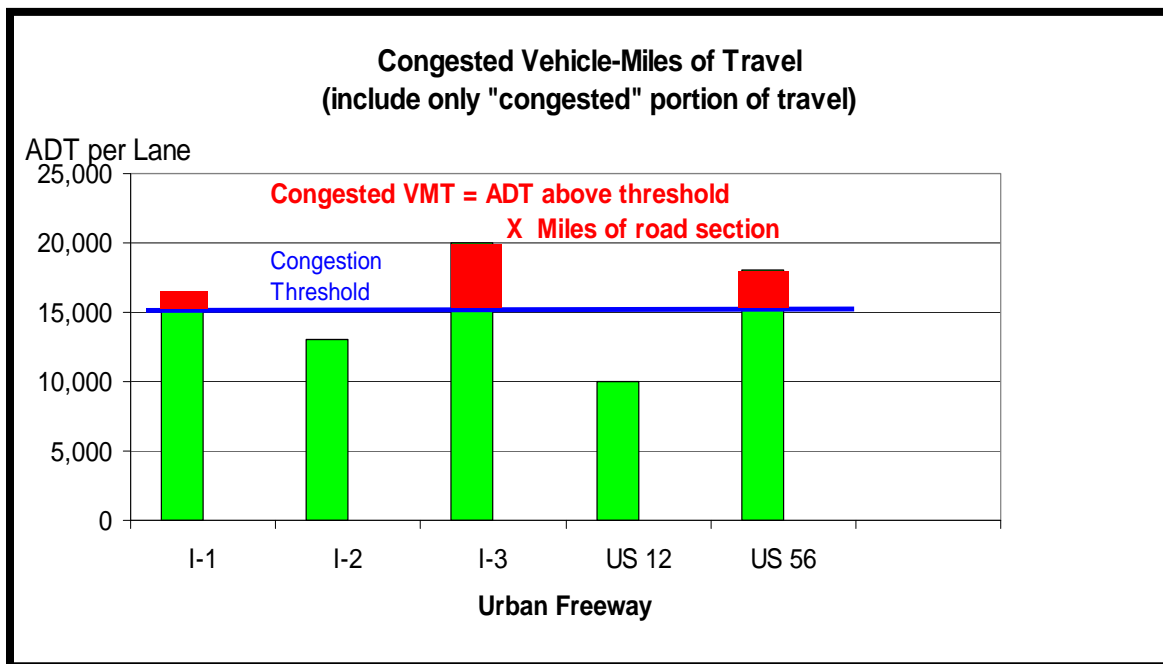


Figure 1. Congested VMT Thresholds and Calculations

Table 4 presents each TMA and its percent of the total congested VMT in the serious category (level of service (LOS) F) of all eight TMAs in Texas. These data indicate that approximately three-fourths of metropolitan congestion is experienced in the Houston-Galveston and Dallas-Fort Worth areas.

**Table 4. TMAs and Percent of Total TMA
Serious Congested VMT (LOS F)**

TMA	Percent of Total TMA Congested VMT
Austin	7.48
Corpus Christi	0.81
Dallas-Fort Worth	36.17
El Paso	2.34
Hidalgo County	2.37
Houston-Galveston	38.19
Lubbock	0.37
San Antonio	12.26

After discussing the various congestion levels in the TMAs, the workgroup came to consensus to use the “serious” threshold. The discussions explored questions as to why some cities have much higher congestion levels than others. One important consideration was that after TTI staff ran scenarios using the three lower congestion levels, there were very small effects on the resulting amounts of congested VMT among the areas. Another reason for selecting the “serious” threshold was to maintain consistency with the Texas Metropolitan Mobility Plans.

A primary point of debate related to this issue was whether including congestion would reward those areas where congestion had improved or send additional funds to areas that were experiencing the highest congestion levels. One side of the discussion was that money should be directed to areas that have shown improvements in congestion, which could be considered by some as a “reward.” The other side of the discussion was to direct money to areas that are experiencing congestion as an attempt to solve those problems. One participant comment was that all Category 2 funds could be sent to either of the two largest metropolitan areas and it would still not be enough to completely solve congestion in either one. This discussion eventually concluded with the consensus that each of the eight TMAs, regardless of congestion levels, should receive at least some of the Category 2 funds. This is accomplished using the serious congestion threshold.

Population Extremes

The work group also considered the idea of creating two pots of funding for the Category 2 funds – one for the larger TMAs and one for the smaller TMAs. A population threshold of 3 million was suggested by David Casteel. Work group members discussed the idea but quickly came to consensus that there would be no overall benefit in creating two pots of money and two sets of TMAs.

Time Value of Money

Another consideration presented to the work group was related to projects that get delayed a number of years from their original programmed years. The suggestion was that if a project gets delayed one or more years, and a project from another area is moved up in its place, the delayed project should receive consideration for the additional costs it will incur due to inflation. The work group discussed this issue, pointing out that there has never been a project that was ready to go to contract in its programmed year that was forced to be delayed to a future year so that another project could be moved up. The work group also agreed that projects are only delayed from their programmed years due to problems inherent to those projects. Therefore, the work group came to consensus that projects delayed due to inherent problems should receive no special consideration for increased costs in the year they are actually let.

Category 2 Factors Considered

The workgroup discussed the various factors throughout the meeting. The discussions included whether to exclude any of the existing factors and/or add any new factors. Participants wanted to know what the impacts on the different TMAs would be if factors were excluded. They discussed the reasons the factors were included in the first place and the importance of each factor.

Centerline Miles

Consensus was reached relatively quickly that the centerline miles, which was inadvertently included (as discussed previously in this report), should be removed.

Fatal and Incapacitating Injuries

Discussion about whether or not to include fatal and incapacitating injuries included the thought that there are other sources of funding dedicated to addressing safety concerns for specific roads. Questions were asked about the relevancy and need to include this factor in light of other funds dedicated to safety. The consensus was that including fatal and incapacitating injuries was not going to strongly favor or hurt any specific TMA and that it would be good to include it as a factor because safety should be a consideration in any road project.

Lane Miles

Part of the discussion related to the lane miles factor focused on whether toll roads were included in the lane miles calculations. TxDOT Planning and Programming staff informed the work group that the current formula does not include toll roads. There was no documentation available explaining why toll roads are not counted. The common belief among TxDOT staff present at the workshop was that at the time the formula began to be used, there were very few toll roads in operation and that they were supposed to be financially self-supporting.

The work group also discussed whether some areas benefit more than others by having lane miles as a factor. This discussion focused on the concept that some metropolitan areas are more compact in nature, with fewer centerline miles, but more lane miles, due

to having highways with more lanes. Consensus was reached to include lane miles in the final formula.

Total VMT

Some participants expressed thought that using truck VMT and total VMT results in double-counting on emphasis of truck VMT. This concern was notable because there is a belief that some TMAs have higher truck VMT than others, relative to road network and other factors. For comparison purposes, scenarios were calculated using total VMT and using VMT with truck VMT removed. The results show little change in impacts on percent of total funding that would be distributed to each TMA. The workgroup came to consensus to use total VMT including trucks.

Truck VMT

As was described in the previous paragraph, the workgroup considered the fact that by including truck VMT, in addition to total VMT, truck VMT is being double-counted and that some TMAs might have great benefits from this situation. The concerns were negated by running test scenarios and the workgroup came to consensus to include truck VMT as a factor.

Population

Considerable discussion was devoted to whether population should be included and at what percentage. Common thoughts were that population should definitely be included. In fact, at times when the work group ran formula scenarios that included only two or three factors, population was included. The primary debate regarding population was which source to use. The work group came to consensus to use the following process for including population:

- Use the 2000 Census count as a base year
- Calculate a growth rate based on changes from 2000 to 2007 State Data Center Estimates
- Apply the growth rate to the 2000 Census count

The TMAs were requested in a subsequent e-mail to submit their populations to Jenny Peterman of TxDOT.

Percent population under federal poverty level

The work group debated whether to continue including this factor in the formula. Discussion included consideration of whether this factor would have an appreciable impact on the final funding distribution and if the factor is appropriate. The appropriateness discussion focused on whether this population sector typically uses automobiles on the roads or mass transit more. Final consensus was to include the factor with a similar weighting as was used in the 2003 formula.

2008 RECOMMENDATIONS

The workgroup concluded the following recommendations regarding the new equation, how it should be applied, and how expenditures should be tracked by MPO:

- New funds distribution equation
- Geographical boundaries to be used with formula
- Individual MPO distribution percentages
- Expenditure accountability by MPO
- Addressing congestion
- Population extremes
- Time value of money

New Equation

After discussing the need to add or remove any new factors and considering various potential factor weightings, the workgroup approved a new funding distribution equation by consensus. It is important to note that some MPOs plan to take the issue to their policy committees for consideration, given the changes in their percentages of the total funding. These changes are primarily due to the conversion from using MSA counties to using portions of counties that are covered by MABs when determining how much of the total funding each area would receive.

The final equation inputs recommended by the workgroup are compared with the existing equation (years 2003 – 2007) in the following table.

Table 5. Basic Equation Elements

Basic Equation Element/Variable	New Recommendation	Old Equation (2003-07)
Census population	17%	22.19%
Population below poverty level	7%	6.88%
Fatal and incapacitating crashes	7%	6.56%
Total VMT (on and off system)	30%	32.50%
Lane miles	10%	16.88%
Truck VMT	14%	14.06%
Centerline Miles	0%	0.94%
Congestion	15%	0.00%

It is important to note that this formula will be used at a point in the future when a new source of Category 2 funds becomes available. This formula does not affect the current UTP.

Geography

The Work Groups did set the policy for determining their individual percentages by stating that these would be computed from demographic data based on the Metropolitan Area Boundary (MAB) of the MPO. In other words, the MAB demographics would be used as the geographical basis for funds distribution. The MAB is generally defined as the area that includes the Bureau of Census Urbanized Area plus an area expected to be the growth area for the next twenty to twenty-five years. Each MPO has a MAB approved by their Policy Committee and agreed to by TxDOT or the Governor.

More specifically, the MABs are to be used as they exist at the time of funds availability and distribution. It is likely that at least some of the MABs will be changed between the 2008 Work Group meeting and the point in time at which funds become available.

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Individual MPO Distribution Percentages

Due to lack of available current demographic data at the meeting, the Work Group was unable to determine the percentage of funds that would go to each individual MPO at that time.

During the Work Group meeting, each individual MPO made guesstimate adjustment to their old data (dropped out non-MAB counties and guessed what % of the partial counties previously used would drop out of their numbers) which had been used by TxDOT staff . Various scenarios were then tested by varying the percentages for each of the seven elements to compare outcomes on individual MPOs. The various scenarios tested are shown in Appendix E of the Meeting Notes which is a part of the Report. These scenarios, of course, vary somewhat when compared to the final demographically calculated percentages.

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then the contribution of population to the percentage distribution for the one area is $17/100 \times 6.7$ or 1.1%. This calculation is performed for each weighted parameter and then the weighted parameter calculations are summed to arrive at a percentage of 100% of the Category funds that would be allocated to that one area.

This is actually a simple process once the demographic data from the individual MPOs is determined. The demographic data would not require revision unless an MPO officially changes its MAB and has the revision approved by TxDOT or the Governor. This should also be a simple change once the system is set up.

The MPOs have, since the Work Group meeting, provided electronic shape files of their officially adopted MABs to TxDOT. Only those portions of counties which are covered by MABs are included when calculating new distribution factors. TxDOT also worked with all MPOs and the TPP Data Management Section for collection of individual MPO demographic data to be used in determining final percentages for a new distribution equation.

Each MPO's individual overall percentage of total distribution was later determined by multiplying their individual percentage of total for each element by the equation factors.

It is important to note that the new equation will be used at a point in the future when new sources of Category 2 funds become available. This equation does not affect the UTP which is being prepared for year 2009.

The following table indicates geographic distribution to the eight TMA MPOs in Category 2 in accordance with the new equation and new demographic data chosen by the Work Group. The table also allows a comparison with the guesstimate distributions of the Work Group at the July 2008 meeting as well as comparison with the old 2003-2007 distribution percentages previously used by TxDOT.

Individual MPO demographic data used in calculating final percentages are shown in Appendix 1.

Table 6. Distribution Percentages

MPO Area	New Distribution Percentages	Guesstimate Distribution Percentages at Work Group Meeting	Old Distribution Percentages Used by TxDOT 2003-2007
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Corpus Christi	2.683%	2.976%	3.292%
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Hidalgo	4.077%	4.074%	3.806%
HGAC	33.941%	32.214%	29.502%
Lubbock	1.571%	1.703%	1.996%
NCTCOG	34.680%	34.166%	36.320%
San Antonio	9.853%	9.772%	11.159%
Totals	100.000%	100.000%	100.000%

Accountability

The 2008 workgroup came to consensus that TxDOT should develop a process to track spending by each MPO. The intention is to ensure that MPOs do not over spend funds due to project cost overruns.

Addressing the Three “Key Points”

The workgroup discussed each of the three “key points” that were presented by David Casteel in his opening remarks.

Addressing Existing Congestion

The consensus was to include congestion (at the “Serious” threshold level as described previously in this report) in the funding distribution.

Population Extremes

Work group consensus was to keep all Category 2 funds in one pot to be distributed among the eight TMAs, according to the recommended formula.

Time Value of Money

Discussion of the Unified Transportation Program (UTP) planning process led to consensus that a process similar to the “Trade Fair” should be re-initiated. An improved process should include accountability for overruns between original allocation of funds and final construction cost. The Work Group also recommended that the programming and letting process should be designed to prevent penalizing one MPO area because another MPO area was allowed to advance a project during times of limited funding. The group also concluded that projects which were allowed to advance in time were done so due to other projects not being able to let on schedule, thus no financial burden should be placed on the projects let in advance, and no benefit should be accrued by the projects

which were delayed due to their development problems. It was concluded that no projects have voluntarily been delayed by one District in order for other Districts to advance their projects. In the event that this situation should occur in the future, the work group recommended consideration of a financial incentive to accommodate inflation costs for the volunteer-district project.

APPENDIX 1

TMA Demographic Data

Selected do not change factor weights																	
Factor Weight	17.00%		7.00%		7.00%		30.00%		10.00%		14.00%		0.00%		15.00%		100.00%
	Population Provided by MPOs		Popouln Below Poverty Level		2007 Crashes		Total VMT Traveled (on & off system) provided by TPP		Lane Miles (on system)		Truck VMT		Centerline Miles		Congestion		Final Percent
TMA																	
CAMPO	1,489,208																9.1349%
Hays			15,057		112				686		492,279		266		473,462		
Travis			133,414		602				1,955		1,329,019		561		4,023,180		
Williamson			19,663		177				1,657		999,466		582		896,873		
Sub-Total	1,489,208	9.1604%	168,134	6.6581%	891	9.6168%	36,779,214	9.4042%	4,298	11.0598%	2,820,764	9.9457%	1,409	11.2062%	5,393,514	7.4584%	
CORPUS CHRISTI	325,527																2.6826%
Nueces			62,156		187				1,495		747,423		522		469,972		
San Patricio			11,369		50				947		357,160		365		136,407		
Sub-Total	325,527	2.0024%	73,525	2.9116%	237	2.5580%	8,602,573	2.1996%	2,443	6.2845%	1,104,583	3.8946%	887	7.0585%	606,379	0.8385%	
EL PASO	734,669																4.0603%
El Paso			204,588		261				1,621		1,223,887		477		1,761,001		
Sub-Total	734,669	4.5191%	204,588	8.1017%	261	2.8171%	14,877,983	3.8042%	1,621	4.1702%	1,223,887	4.3153%	477	3.7950%	1,761,001	2.4352%	
HIDALGO	710,514																
Hidalgo			272,368		217				2,227		986,525		796		1,777,439		4.0766%
Sub-Total	710,514	4.3705%	272,368	10.7858%	217	2.3421%	12,852,685	3.2864%	2,227	5.7308%	986,525	3.4784%	796	6.3291%	1,777,439	2.4579%	
HGAC	5,576,673																
Brazoria			31,493		190				1,294		507,449		476		518,326		
Chambers			3,206		45				744		534,173		309		496,906		
Fort Bend			37,058		167				1,182		655,327		434		1,453,673		
Galveston			36,325		196				1,059		266,829		332		236,125		
Harris			650,406		2,254				4,882		5,163,260		1,181		22,731,640		
Liberty			12,863		85				817		276,031		368		197,590		
Montgomery			41,153		350				1,219		912,331		477		2,786,218		
Waller			5,885		43				584		333,427		235		274,437		
Sub-Total	5,576,673	34.3030%	818,389	32.4082%	3,330	35.9417%	131,316,039	33.5767%	11,782	30.3137%	8,648,826	30.4948%	3,812	30.3241%	28,694,915	39.6805%	
LUBBOCK	225,428																1.5710%
Lubbock			46,751		140				1,705		515,566		635		280,991		
Sub-Total	225,428	1.3866%	46,751	1.8513%	140	1.5111%	4,541,647	1.1613%	1,705	4.3873%	515,566	1.8178%	635	5.0481%	280,991	0.3886%	
NCTCOG	5,644,271																
Collin			38,642		342				1,517		863,933		559		3,960,942		34.6799%
Dallas			381,322		1,318				3,353		4,278,699		785		12,315,838		
Denton			39,496		289				1,558		1,109,014		563		2,170,433		
Ellis			13,272		121				1,536		963,650		627		447,237		
Rockwall			3,116		27				339		239,283		144		159,616		
Tarrant			212,969		1,215				3,213		2,964,012		863		6,517,482		
Sub-Total	5,644,271	34.7188%	688,817	27.2772%	3,312	35.7474%	142,824,585	36.5194%	11,516	29.6309%	10,418,591	36.7348%	3,541	28.1710%	25,571,548	35.3614%	
SAN ANTONIO	1,550,797																9.8530%
Bexar			252,680		877				3,274		2,642,858		1,014		8,229,171		
Sub-Total	1,550,797	9.5392%	252,680	10.0061%	877	9.4657%	39,297,935	10.0482%	3,274	8.4227%	2,642,858	9.3184%	1,014	8.0680%	8,229,171	11.3796%	
Grand Total	16,257,087		2,525,252	100.0%	9,265	100.0%	391,092,661	100.0%	38,866	100.0%	28,361,600	100.0%	12,570	100.0%	72,314,957	100.0%	

APPENDIX 2

Meeting Notes UTP Category 2 Work Group Meeting July 22-23, 2008 Embassy Suites North – Austin

mgwade tti fn=UTP cat 2 mtg notes 9.26.08

Meeting opened 8:45 Agenda handed out (See Attachment A, Page 28)

M.Wade: Montie Wade welcomed the group and stated that David Casteel will make an official welcome and issue the work group charge. Mr. Casteel was tied up in another meeting at the time and Wade proceeded with allowing self-introduction of the work group and introductory remarks of those who were veterans from the previous Category 2 work group. Veterans shared their collective recollection of events, processes, and conclusions of the original Category 2 work group. It was noted that the new work group has only five returning veterans from the original work group.

(Attendance Roster is included as Attachment B, Page 29)

Wade noted that the original Category 2 report had recommended that the work group be reconvened after a five-year time period to reconsider the equation for distribution of funds.

Wade suggested that this meeting should not be considered to be a formal process and that individuals are encouraged to make comments and ask questions at any time during the deliberation process.

E.Collins: When will these changes be implemented?

W.Dennis: It is my understanding that any change in the distribution equation would not be used when the next UTP program of work is prepared. It is my understanding that the new equation will be used when new money is found. We are not sure when it will occur, so this time is indefinite. Assuming that the UTP will be updated before the end of the current legislative session, and assuming that new money will not be found until after the session, I think it is safe to assume that the new formula will not be used on the 2009 UTP. We are focusing beyond the current UTP toward the next one. As you know, the Department has tried to pare numbers back to funding levels of what is available. Consideration of use of Proposition 12 funds may allow mobility funds to be available sooner than previously anticipated. If the legislature allows Prop 12 money to be used, these new equations could be used for that distribution of funds.

M. Wade: We will skip Agenda Item I until David comes in, thus we will move to Agenda Item II. We basically included the complete review of past deliberations of the old Category 2 work group since there are so few veterans returning. Bill Frawley will give us background of past Category 2 deliberations, sort of a where we were, the report, and where we are now.

II. Background – Bill Frawley - Brief background review and slide presentation (included as Attachment C, Page 30) of our process five years ago

B.Frawley: Reviewed the history of the Corridor Guidelines Work Group which made recommendations to the Category 2, 3 and 4 Work Groups. He showed the old UTP categories of work that were put into the new Category 2. The charges issued to the 2002 Category 2 Work Group were described and mention was made that the major charge was the development of a funding distribution equation for the eight TMAs plus the creation of three 5-increment sets of projects. It was noted that the participants had agreed to allow each TMA to create its own project prioritization process. Geographic funding fairness was also a concern of the early work group. The original work group developed criteria and a weighting scale.

The slide presentation ended with Final Recommendation from the original Category 2 work group as follows:

Truck VMT	(14.06%)
Population	(22.19%)
Centerline Miles	(0.94%)
Lane Miles	(16.88%)
Fatal & Incapacitating Injury Accident Crashes	(6.56%)
Percent Population under Federal Poverty Level	(6.88%)
Total VMT	(32.50%)

E.Collins: What is the set geographic boundary?

B.Frawley: The work group recommended use of the Metropolitan Area Boundary. I believe that TxDOT used Counties in the Metropolitan Statistical Areas (MSAs) instead due to data constraints, but we will come back to this when we get to agenda item III.

P.Waskowick: Was truck VMT on- or off-system used?

B.Frawley: Both were included, but most was, of course, on-system.

A Johnson: What about fatalities?

B.Frawley: Both on- and off-system fatalities were included.

G. Johnson: They are all-inclusive then?

B.Frawley: Yes

E.Collins: What was considered in allocation? Are existing programs considered?

W. Dennis: No, it was all pooled together. These Mobility funds are available for allocation. They are a combination of NHS funds, old Interstate maintenance, Interstate allocation, etc. How those were distributed to Texas was not considered.

M. Morris: Back to the previous criteria we used-it didn't matter in the end what criteria or weights were used because they were not independent. There was little variability in the scenarios. If all scenarios were run and compared, there was not two points difference between them. And we can only use whatever credible statewide data there is available when we come up with our new equation.

I would like to mention the distribution of the Category 2 funds in relationship to the UTP process. We discovered that some areas didn't get enough project funds in the first five years and were allowed to use 115 percent of funds allocated to them. One of the ideas that we need to pursue in this session is to get us back to task on making policy to prevent areas from building quicker than their allocation permits.

What we need is a policy to limit percentage of allocation used in the first "X" number of years, so we don't create another cash flow problem. This also resulted in some MPOs using up allocations of others when we had the reduction in allocation of funds.

G.Johnson: There must be flexibility. We don't want to strap down our ability to build.

M.Morris: We do need flexibility, but we also need boundaries or the process will be meaningless. We need to discuss managing the process.

G. Johnson: Max Proctor used to have spreadsheets that kept track of which MPOs/districts spent how much money; the trade fair process was also good.

M.Morris: If we make allocations and they don't mean anything, we don't need to meet.

R.Boone: I don't disagree, but it possibly wasn't necessarily allocation and spending that caused the cash flow problem, rather it could have been the allocation forecast. I think the problem was that the forecasting wasn't correct.

C.Clark: This old work was done prior to Prop 14 and it couldn't have been forecasted. That may be the bigger issue as we go to the next UTP [2009]. That could drive overspending early.

G.Johnson: Overspending is a problem, but other impacts are too.

S.Warren: There is a huge difference among the TMAs – in both corridors and funds; the small ones will have to spend all of their funds up front and then we are out of the Category 2 funds for a long time. That is exactly the situation we have in Lubbock.

M.Morris: I think the state should be able to build the projects they need to build, but we have so many districts that spent 400 percent of their funding right away and the state can't afford that.

S.Warren: We need to accept that if we do that, we [Lubbock district] are out of the game for a long time.

J.Peterman: In the past, money has been project-specific, not a true allocation. Now moving into a new UTP, Category 2 is an allocation and you will not be able to overspend the amount, even if you spend it all up front. The TxDOT Administration is working on a process regarding who will spend first, second, etc. In other words, accountability of allocation and spending is the intent.

W.Wells: The trade fair was designed to be a scheduling of projects within apportionments – there were no gains or losses of allocated funds to any area anticipated; it was a balancing of projects and funds per year.

R.Boone: They [funding schedule adjustments] were done pretty much before-hand by submission. Max had it all figured out and it would be balanced.

A.Johnson: I am concerned about having projects that are not funded put into the trade fair.

M.Wade: Unfunded projects should not ever occur in the trade fair. The idea is to take funding that is allocated but cannot be used early, and “bank” the funds to allow others with projects ready to build to use them so the funds are not held stagnant.

M.Morris: You would have to process a TIP amendment in order to move a project up. Over a five year period nobody is hurt. The process could be very efficient, but it needs safety factors to avoid issues like this past spring where areas overspent their allocations.

R.Boone: When we were doing the trade fair, it was an iterative process, and financial constraint was maintained. It was done every year.

A.Johnson: I don't disagree. I think it could work, but should be tweaked so the TIP can be kept transparent.

T.Niskala: Was it a situation of State vs local TIP?

W.Wells: No, there was never a situation of state vs local TIP.

G.Johnson: That is what we did. It was a process of trading off dollars or projects that could not be let for some reason. A trade was made to allow someone to move up in the letting schedule and we could move back to our expected date of readiness.

M.Wade: It sounds as if you are in favor of the programming and scheduling being tied together which is the process which TxDOT now has in progress. You can recommend in your report that an activity such as the Trade Fair with proper record-keeping be initiated. You can recommend following up on that and having accountability, thus not permitting the loose process you have described. I think that Jenny has just said that TxDOT is looking at an accountability system that will keep track of allocations and actual expenditures.

R.Boone: Trade fairs made things more stable because you knew what the TIP was. You didn't even have to attend the trade fair; it was done by communication and by use of spreadsheets.

J.Cantalupo: How have we ensured that those projects taking a backseat got their funding later?

M.Morris: That's what we need to look at.

M.Wade: I conclude that what the group is saying is that management of the allocation and letting process has been too loose in the past and you would like to address that with recommendations from this work group?

J.Cantalupo: The distribution is easy, but scheduling is the hard part. What if all the MPOs said take the other's projects first?

M.Morris: The 80 percent rule is what helps now. We are in financial constraint so we are watching funds closely enough. We just need to improve information systems to ensure this doesn't happen. If we build an information system across all programs as we build it, it all becomes integrated.

J.Cantalupo: I agree, an information system needs to ensure those who wait can move to construction when their time comes. The scheduling part seems to have made that more difficult. We can control scheduling but not the availability of funds.

P.Waskawick: Projects become more expensive the longer you wait, and costs rise. In the allocation process - if you are getting \$2 MIL a year and you have a \$6 MIL project; does it even make sense to get the funding if it is never enough?

A.Canon: Are we considering the two new TMAs in this process of allocation of funds?

M. Wade: If we stick with these principles and revisit in five years, there will be no TMAs designated by the census bureau until about 2011 or 2012. The census will be conducted in 2010 but designations will not be out for a couple of years after the census.

A. Canon: Maybe smaller TMAs are doing too much work to be TMAs and would be better off not trying to meet the requirements.

R.Gilyard: In non-attainment areas with fiscally constrained TIPs, costs and schedules are identified. How can this be changed in a trade fair?

M.Wade: That is not the spirit or intent of a trade fair. No project is ever pushed back due to other project needs, a project can be volunteered to be moved back in time of letting due to circumstances such as ROW clearance, environmental clearance, utilities, etc, that then allows other people to move their project up in the letting.

M.Morris: If all projects are on schedule, you do not need a trade fair.

R.Boone: No area moves their money and projects unless they choose to. It is a volunteer effort.

G.Johnson: What do we do when scheduled projects don't move forward?

W.Wells: There has always been somebody else that wants to move up on the schedule.

M. Wade: Moved to Agenda Item #3 since David Casteel had come into the meeting.

I. Charge and Comments to Work Group – David Casteel

D.Casteel: In the past we had a formula you came up with in 2002 and we applied it to dollar volumes we thought would happen. We then discovered that we are not going to have enough money to complete that original forecast revenue. TxDOT finance forecasters came up with what we call the 80 percent rule as the best we can do for now.

Now we are asking you to review the old distribution equation due to the 5-year time period in hopes that we'll have funding to use it with later. I understand that your comment might be that for now we will multiply it times zero because there are no existing mobility funds.

There are three key points that we would like for you to consider in review of the old distribution equation.

1. Addressing existing congestion - The formula is good, but doesn't address what we are doing to address congestion levels. You should address "Are you applying the funds responsibly to reduce congestion? "

2. Population extremes - Is there really a formula that reflects realistic needs by population? You might consider two pots of money for Category 2. One for mega metros (say greater than 3 million population) and another for smaller areas (say less than 3 million population).

3. Time value of money – You might consider compensation or credit values for projects which are moved ahead in time of letting in order to let other projects ahead

of schedule. Trades could be done in the open and in a fair market type atmosphere, so the compensation could be equitable.

You are building a new formula to use from here on, whenever new funding may become available; this will not affect the existing UTP or past funding levels or past allocations.

M.Morris: We need to talk about the UTP and TIP. Feds may want to close down the TIP due to changes in numbers – year of expenditure amounts are out of compliance.

A.Johnson: So should we adopt a new UTP right now? They will apply lower numbers and prevent us from building projects.

P.Waskowick: With a new TIP in 2010 we don't have time to redevelop project lists and present a new TIP.

D.Casteel: You are both right, after discussions with FHWA, we are proposing that Prop 12 and 14 funding will be reasonable expectations of funding and we should include them in TIPs.

M.Morris: Prop 12 and 14 funding needs to be included in the UTP also.

R.Boone: You have to adopt a new UTP and it will differ from existing TIPs.

M.Morris: I can't imagine doing a TIP right now. A TIP has a different set of assumptions, Feds will jump on it.

Unknown: We do not have Commission approval and we can't build any projects.

M.Morris: What are you hearing from FHWA?

Unknown: Use of more reasonable funding will help resolve the issue.

E.Collins: Regarding use of a congestion factor, is concern local or statewide? How can we identify projects at the local level while considering congestion?

M.Morris: Maybe the state is wishing to address congestion overall?

C.Clark: Was this done with this old formula? Didn't you have congestion in it?

W.Dennis: The existing equation does not specifically address congestion. It uses VMT as one factor but is not specifically congested VMT.

D. Casteel: You need to recognize that we are one state and need to address congestion statewide; the Texas Mobility Fund (TMF) used this formula with a little different percentage weightings of criteria and no specific congestion criteria.

R.Richardson: I don't know if the congestion index is a proper tool for this exercise.

M.Morris: The question is, should we be using a congestion index in funds distribution?

G.Johnson: If you look at needs, this brings them up.

R.Boone: Relative congestion was looked at and considered relative by region. This could be an issue depending on how you look at it.

D.Casteel: I don't know how to figure it for the state, but if the formula is congestion driven, you may want to look at the mega-metro idea.

R.Boone: You could throw money at a couple of areas' congestion and not touch it.

D.Casteel: We should be objective and ask where is congestion hurting our state's economy? We have done it in Houston.

Past Allocations Review and Issues – Jenny Peterman and Montie Wade

J.Peterman: The previous funds distribution used counties in metropolitan statistical areas (MSAs) around the TMAs; was that the intention of the workgroup that met in 2002-2003?

Consensus was that MAB was specified by the first work group. TxDOT must have used MSAs to fill available data slots.

General: There was discussion and consensus to remove counties in areas that are in MSAs but have no portion of the MAB in them. The counties removed were:

- Austin
 - Bastrop
 - Caldwell
- Dallas-Fort Worth
 - Henderson
 - Hood
 - Hunt
- San Antonio
 - Wilson

M.Morris: We should have a built-in incentive to incorporate into the MAB just what is within the metro area. MPOs should go to their board and say if we become larger we should get more money.

Unknown: I don't think it should be CMSA or MSA, if MPOs make the hard decision.

J.Peterman: An issue with calculating MAB area by percent of county area is that it may not reflect the correct percent of population, etc. For example, looking at Corpus, percentage by area doesn't work because it doesn't reflect population, VMT, etc.

M.Morris: Nobody likes the use of land area to make percentage calculations.

T.Niskala: If we [Corpus] are doing calculations, we use just the urbanized area.

M.Morris: Is there a way you can expand the planning areas and tell policy officials that you can do planning and programming in that 20-year growth area? The plan looks at a several-county area.

A.Canon: If the MPO has plans to extend their areas, a better recommendation would be that every two years the policy be redefined. Moving out your boundaries for planning purposes is okay, but bad to have built-in policies when planning and programming areas are different.

T.Niskala: The Official planning area boundary should be the MAB.

M.Morris: What if we could recommend that the attributes of our allocation will be a function of this boundary, and there's room for growth?

A.Canon: We have incentives to get proper jurisdictions.

J.Cantalupo: Most everyone agrees it makes sense to take in two more counties in our area.

M.Wade: We will not have a valid boundary to make calculations to use in the distribution equation without some more work on the part of someone.

M.Morris: The Current UTP will at least be good for the rest of 2008; we have lots of time - six months to a year - to redefine boundaries. We should run calculations for different boundaries and know what to plan for. This is our incentive to integrate planning and programming.

Unknown: We could make the assumption that the metro area boundary is purely for congestion mitigation fund calculations. Funding programs have no sacred definition to the metro area boundary.

Unknown: Our planning funds come from the Feds' definition which is urbanized area boundary.

Unknown: But does that change if we pick up extra counties?

M.McCoy: The Feds' definition is consistent with this. You do not get additional planning funds just because you increase your planning area boundary.

J.Cantalupo: There are lots of good reasons to expand our boundaries to include these counties into the MAB. The only con is if we do it we can't explain how this will not harm the MPO when we get down to funding.

D.Casteel: Do you have a problem with this group not being able to come up with an equation?

M.Morris: We can and should come up with an equation, general criteria with weights, and apply it to whatever area you come up with based on MAB. You can still plug in a different geography next year.

J.Peterman: Will the urban MPOs (Category 3) be able to do the same thing? They don't have the same staff levels as TMAs. That last time, Category 3 was encouraged to adopt the same formula. Will they be able to provide the same data? How often will we update the geographies? Annually? Every time an MPO updates their area?

D.Casteel: Update every time we have money to put into a program.

R.Gilyard: This process is to be able to tell MPOs how much money to expect from a distribution of overall mobility funds. That means we can update every time something changes or update the input data before each new distribution of funds is planned.

M.Morris: Do you have problems with precision and accuracy because of including these slivers of counties in the MAB and small changes?

J.Peterman: It will not make huge differences but it will come up when we meet with the MPOs to answer their questions regarding what they can expect in the way of funding.

M.Morris: I wouldn't let that bother me, because I can't imagine the numbers changing very much.

M.Wade: It is essential that we redefine MAB because in some cases we have been in some MPOs areas not inside Texas. Examples are El Paso (includes New Mexico) and Texarkana (includes some Arkansas).

A.Canon: We have found out that some of our counties don't want to be included in the metro planning area.

D.Casteel: What are the chances that San Antonio and Austin will combine as one MPO or one planning area?

Unknown: We can't do that under the current legislation.

Unknown: If we all become one metro area boundary, we can all benefit by a growth in allocation.

A.Canon: That has to be presented to the Category 3 at their meeting too. No proposals, just knowledge of the incentives and benefits. Also, Category 2 is not trying to take over; we are just not calculating and incorporating all our resources.

M.Morris: The mechanics are all according to each area. We can at least build in the incentives.

General: Various scenarios were run using weighting factor for criteria.

General: One test was conducted to remove lane-miles from the formula, but there was no significant difference in distribution of funds to the MPO areas.

BREAK

Possible Congestion Factor Process – Tim Lomax (See Attachment D, Page 38)

T. Lomax: We have developed a basic approach to include congestion for your consideration. You could use the same philosophy as used in the Mobility Plans. This would allow some emphasis and focus on congested locations by estimating the level of congested travel above a threshold. We will show you a method of computing the level for different thresholds by use of VMT above the threshold. The data is organized by either urban or rural and separated by county. The congestion levels were based on Quality of Flow values and the Urban Mobility Report. “Freeways” includes tollways, and street capacities are based on being divided facilities.

The congestion factor considered for inclusion in the Category 2 and 3 formula allocations was based on the Texas Mobility plan process used during the period from 2003 to 2007. That process examined the needed capacity improvements to achieve mobility goals by focusing on the locations with serious congestion. That same philosophy was used with the Category 2 and 3 data by identifying road sections with traffic volume per lane values in excess of the congestion threshold. The process is described below.

1. The allocation process will use congested vehicle-miles of travel as the performance measure. The amount of congested VMT will be summed in each MPO area (the same area used in other factors of the Category 2 and 3 processes).
2. TxDOT’s roadway inventory dataset for 2006 was used for demonstration purposes during the working group meetings. The current dataset would be appropriate for calculations of subsequent allocations.
3. The road network was divided into urban and rural roads based on locations of each section. The traffic volumes that indicate congested condition are different depending on location.

4. The road network was characterized as streets or freeways. The streets included principal arterials, minor arterials and frontage roads. The freeway category was comprised of all limited access roads including tollways.

Functional Class and Area Type	Functional Class Number (From HPMS)	Eliminate Serious Congestion * (LOS E)	Eliminate Severe Congestion ** (LOS F)	Eliminate Extreme Congestion *** (LOS F-)
Urban				
Interstate, Freeway & Tollway	11 & 12	16,000	20,000	25,000
Arterial street	14 & 16	5,500	8,000	10,000
Rural				
Interstate, Freeway & Tollway	01	10,000	12,500	15,000
Highway & Arterial road	02 & 06	4,500	6,000	7,500
* Based on TxDOT Quality of Flow Table Average Daily Traffic per Lane values ** Based on 2007 Urban Mobility Report “severe” congestion values *** Based on 2007 Urban Mobility Report “extreme” congestion values Note: Arterial definitions do not differentiate between divided and undivided; divided arterial standards were used to encourage use of access management techniques.				

5. The daily volume per lane thresholds used to indicate congestion was estimated from the TxDOT Quality of Flow table. Exhibit 1 presents the values used to identify sections suffering serious congestion (worse than level-of-service E). This target was the chosen threshold as well as the one used in the Mobility Plans. The other two thresholds were presented for comparison purposes.

6. The volume per lane on each section of road was compared to the threshold value to determine which sections were congested.

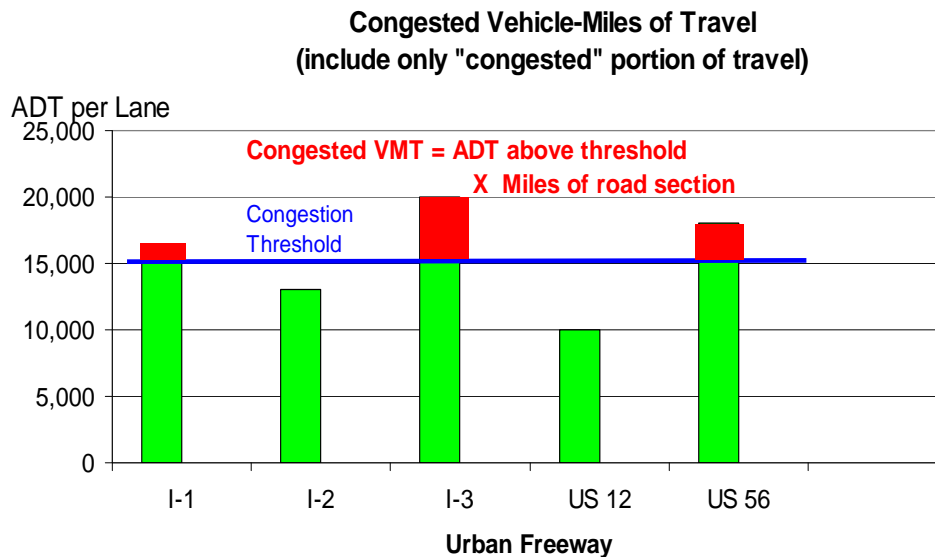
7. For any section above the congestion threshold, the threshold value was subtracted from the 2006 daily traffic volume per lane to calculate the amount of traffic above the threshold. This is illustrated as the dark sections of the bar graph for roads I-1, I-3 and US 56 in Exhibit 2.

8. The volume per lane above the threshold was multiplied by the number of lanes and by the section length to calculate the amount of vehicle-miles of travel above the congestion threshold.

9. The vehicle-miles of travel above the congestion threshold were summed for each MPO area and the percentage of the statewide category value calculated for each MPO region.

Congestion Threshold Values

Unknown: Concern was stated regarding connecting the TMMP and UTP.



A.Johnson: Is VMT on all major roads included?

T. Lomax: Yes, the congestion problem on those major roads is best indicated by the amount of volume over the threshold, rather than using all the volume on the section. For example, if you have a 6-lane freeway with a daily volume of 110,000, it's the 14,000 above the threshold (16,000 times 6 equals 96,000) that causes the problem. If you use the total volume on congested roads, wider roads will get more weight in the formula, even if they're only slightly congested. So, congested VMT is recommended, not total VMT.

A.Canon: Why use just divided arterials? Wouldn't you want to look at worst case scenarios to show improvement?

T.Lomax: The designation of raised/not raised median was only used to develop the threshold criteria; it is applied to all arterials.

Unknown: What are you suggesting as a term -"congested VMT"? Is this the amount above the threshold? Response: Yes.

T. Lomax: We have prepared three levels for your consideration. It was prepared using the same geography that was used for other factors in the old formula (MSA).

M.Morris: Do you have the fund allocations that came out of the process we used last time?

T.Lomax: Yes, comparisons are:

	Funding Percentage	Serious Congestion (LOS F)
Austin	9%	7%
Corpus	3%	1%
El Paso	5%	2%
Hidalgo	4%	2%
Houston	30%	38%
Lubbock	2%	.4%
DFW	36%	36%
SAT	11%	12%

T.Lomax: Congested VMT is the metric – that is, the VMT above the congestion thresholds.

- Serious - congestion worse than Level of Service E
- Severe - congestion levels about halfway between LOS E and LOS F
- Extreme - congestion worse than LOS F

[Lomax shows chart of Congestion levels by ADT per lane table. He also shows Congestion level targets for different type facilities by ADT per lane. It is noted that the process will only use the congested portion of travel for the factor.]

M.Morris: A question to explore – why is congestion percentage for some areas different than the formula percentage? Austin seems congested, but the congestion factor is lower than its previous distribution percentage; Houston seems like congestion has improved, but congestion factor is much higher than the previous formula percentage.

M.Morris: The one that's changing the most is Houston, what makes Houston unique in this?

D.Casteel: They have a lot of people with fewer roadways than you. 225,000 people were added to the population after Hurricane Katrina.

Unknown: What about zoning? Does Houston's lack of zoning affect this issue?

A.Johnson: VMT, truck volume, lane miles could all be hurting Houston in the existing formula.

P.Waskowick: The old formula doesn't include the tollways in the lane miles.

M.Morris: Lane miles are on-system, safety and fatalities are included.

Unknown: Possible issues in Houston's formula:

- Toll lane miles not included last time

- Houston is older, fewer thoroughfares and mainlanes
- A lot of poor people?

D.Casteel: You could have two buckets for funding. Is the TMA the appropriate breakdown between Categories 2 and 3?

S. Warren: Would Lubbock get more money in Category 3?

A.Canon: No, only 10 percent of funds go to Category 3 and 65 percent to Category 2.

D. Casteel: What about the 2 bucket approach? DFW and Houston in one bucket (Category 2a), get a certain percent of 65 percent, and the rest goes to the other Category 2 areas (Category 2b).

Unknown: Should we let the Commission decide how to break out the funds based on the congestion formula?

M. Morris: One formula including the congestion factor is good, but we do not need to break the Category down into 2 buckets. It just complicates the process and gives the Commission something else to throw back in our laps.

Others: We do not need two separate funding buckets for Category 2 funds.

Others: Agreed.

M.Morris: We need to do a better job of incorporating congestion as a factor. This only becomes an issue if you are dealing with enormous amounts of money.

D.Casteel: Conversely, if you have limited funds, put it where it does the most good.

M.Morris: What if people in areas that try to raise taxes refuse to support the legislation if money goes to other areas? This would be a serious problem in the near time when we will be trying to increase funding for the Department if additional funding is not covering the entire state.

R.Hagquist: By including VMT, you are supporting fair equitable allocation.

J.Cantalupo: Does putting money in most congested areas do the most good?

R.Hagquist: In economic terms, yes, because the most damage is done by congestion.

J.Cantalupo: I understand, but is it cost-effective?

M.Wade: I am concluding that the consensus of the workgroup is to use congestion in the equation but not the need two buckets of funding by splitting Category 2?

M.Morris No general consensus has been reached.

M.Morris: Many corridors that are included in the congestion formula cannot be improved except through sustainable development (rail, etc.). There are other ways to define congestion and the possible solutions.

J.Cantalupo: Tom was saying to look at areas where you can actually make the most improvement for the amount of dollars.

M.Wade: Can we have a show of hands on whether or not we should include congestion as part of the equation?

Vote shows General consensus is yes.

Wade: Do we need two buckets?

Vote shows General consensus is No.

Unknown: Austin/San Antonio got special early impact funding to keep them out of non-attainment status and Corpus should get the same funding.

LUNCH BREAK

II. Re-evaluation of Individual Elements of Category 2 Distribution Equation - Work Group

M.Morris: You won't be able to determine if other factors are relevant until you know how congestion figures into it. One way to measure it is to consider a factor such as VMT divided by lane miles. Analytically, let's look at it.

Using the congested VMT formula, Austin doesn't move up. Houston does, San Antonio is a wash, and DFW doesn't change at all. Five go down, two stay the same and only one goes up. The way they are measured, if there is a limited network, there is more congestion. There aren't as many areas to spread the congestion out. We need a formula not so biased toward limited networks.

M Morris: Let's analyze why this measure doesn't affect all areas equally. We are also measuring a redundant network. We need to pursue other ways of defining congestion for the purpose of determining congestion levels.

R.Hagquist: Delay costs for Houston and Dallas, and lane miles and travel time index conflict with the table.

S.Warren: We don't have congestion, we have a finishing problem. We (Lubbock) would not have a problem with Houston and Dallas getting more money. We can afford to lose a little, but not a lot.

M.Morris: I just want to make sure everyone is represented.

G.Johnson: What would you do Michael?

M.Morris: I would use time travel delay in figuring the congestion.

T.Lomax: Travel time index is an intensity measure. For the system it does apply, but it doesn't indicate the size of the problem. It does not show the number of people suffering the congestion.

R.Hagquist: Congestion cost would be a good measure. From TTI's 2007 Urban Mobility Report, the cost in billions (2005 numbers)

Houston	\$2.2
Dallas	\$2.7
San Antonio	\$0.5
Austin	\$0.2

M.Morris: Before accepting, we have to determine why Houston is so much higher.

A.Johnson: How is this different from TMMP?

T.Lomax: It's not inconsistent; I just don't know how this would compare to using travel delay.

Mobility report numbers are for urbanized area not MSA or MAB

G.Johnson: What would you need to run the analysis as Michael suggested?

Initial general discussion was that the congested VMT comparison might not be an equitable comparison. After review of the data in the sample calculations, the work group concluded that this method of congestion evaluation and incorporation was a fairly equitable comparison.

T.Lomax: To use the state model as Michael suggested? We could run through estimates to determine delay by segment.

M.Morris: Say we used this, how would we weight it?

D.Casteel: Maybe we weighted lane miles too much before?

M.Morris: But we took lane miles out and it only moved Houston's number 1 percent.

J.Peterman: Can you try to calculate congestion using the current formula to run a sensitivity test?

***Jenny explained what she had done to this point.
Lane Miles and Toll Roads Discussion***

The Toll Road Authority built roads not figured into some calculations because they were assumed to be self funding for rebuilds and maintenance. Either they should all be included or none.

J.Peterman: Only on-system lane miles are used.

On and off system VMT were requested.

This was not discussed before, but now toll roads are an issue.

If you are not including toll roads in one part of the calculation, why use it in another area?

M.Morris: VMT is figured, sort of like gas tax receipts. They are figured into your revenue stream, on and off system.

When they run toll viability to determine if there is enough support to build, how many have they run this on?

J.Peterman: We anticipated using data to adjust by area percentage so we could be staying within MPO boundaries.

Discussion regarding the mechanics of tracking scheduling changes and how to handle inflation issues while waiting for Jenny to connect her computer.

See Attachment E, Page 42, for J. Peterman's spreadsheet tables.

M.Wade: Sounds like where we are heading is to use updated data, same geography, same formula, and with boundaries reduced from MSA to MAB as a pilot trial to see what the distribution would be at this time.

B.Frawley: Regarding centerline miles and the reason that the 9.4 percent occurred, one person voted to include it on the final vote and it was not supposed to be voted as a factor. Instead of throwing centerline miles out, the final weights were determined by percentage and this very small percentage was used. That is how it got into the final formula. Actually the work group had decided to exclude it but one person inserted it into the vote and it got included into the equation.

R.Hagquist: My suggestion is that you use three terms: car VMT, truck VMT and congestion equally. You could leave out population, lane miles, safety, and poverty.

Group worked on the chart by revising databases: Add population back in and take congestion out and add percent population below poverty level back in. *Wade led discussion about getting back to defining congestion and weighting the factors, because time was running short.*

BREAK

Tim Lomax's spreadsheet showed Congestion Cost (delay and fuel) is more heavily weighted toward Houston and Dallas-Fort Worth and, therefore, would tend to send more funds to those areas.

M.Morris: I suggest we use the original formula, but drop the dividing line back to moderate congestion, not serious. This might be more inclusive of all areas instead of the largest two.

T.Lomax: Maybe we can go 10 percent lower. We could bring those back for your review tomorrow.

M.Wade: We can continue to discuss the attributes and weight of congestion and see what Tim can bring back tomorrow.

M.Morris: We're into weights now? Starting point is to shave some off each of the other six attributes to provide a place for congestion. (Removing center line miles at .94 percent)

Scenarios:

Round percentages to nearest 10th (test 1)

Congestion 15 percent with other factors rounded down to nearest fifth

(J.Geiger)

Congestion 50 percent and other factors cut by half (D.Casteel)

Congestion 25 percent and other factors cut by 25 percent (test 2)

Discussion about the formula, reflecting that we previously took out counties not in MABs.

Jenny added them back into the database.

J.Cantalupo: What about the data from the partial counties?

It was discussed that we could not accurately calculate those areas because we don't have the correct populations for those areas.

J.Cantalupo: Reiterated and M. Morris agreed that we need to include whatever the MPOs' MAB geographies are as they currently exist. He also noted that it will be up to

MPOs to bring that data back because we cannot create it here and now at the work group meeting.

S.Warren: Suggested rounding percentages to the nearest one-tenth of one percent.

M.Morris: We could subtract truck VMT out of Total VMT overnight to look at that tomorrow.

D.Casteel: I think the lanes miles and truck VMT look too high. I'd kick them both down to 5 percent and add the extra 10 percent to congestion.

M.Wade: We will give out copies of the weightings chart and come back tomorrow to discuss.

S.Warren: This is not percent change, it is points.

M.Morris: Asked D.Casteel if it is consensus in his office that the smaller MPOs are under funded?

D.Casteel: Houston seems to be under funded.

We're carrying this forward to this committee now. We have data now we didn't have five years ago, and we should be able to get this done.

J.Cantalupo: we need to remember that none of this is final until we can include partial counties.

T.Niskala: We [Corpus] are two complete counties

Point is made that that is not their official MAB, which is what everyone else is using. We need to have uniformity.

M.Morris: The earliest this could impact us is in a year.

D.Casteel: Unless we use this proposal to get funds from Prop 12.

M.Morris: We have some unclear things that can be cleared up by the time this is actually going to be applicable.

J.Cantalupo: Either put all the counties back in, or make an agreement that we will come back with the partial information. Not doing it because it's not easy to do on a spreadsheet is not acceptable. We either correct them all or remove the same data from them all so we are all on an even playing field.

M.Morris: What if we make a policy that the MPO area boundaries are changed and ask the governor to approve?

J.Cantalupo: Agreed and reiterated that all should be the same, whatever that is. If we agree today to use official MPO boundaries, then it doesn't make any difference how long it takes to get our boundaries reset.

Tomorrow we will have a theoretical formula that can be run on pretend money and by the time there are actual allocations, we will be ready to allocate.

To be fair, now that we are going to use the congestion formula in the allocation of the "new" money whenever it appears, we need to let the MPOs know that they need to update their boundaries.

The formula we leave here with tomorrow will not change, but the geography will change. This means the commission will have a range to look at that will be firm by the time the money is available.

D.Casteel: The only thing on the immediate horizon is a one-time bond fund.

J.Cantalupo: The concept of correcting boundaries is something we can take back to our local policy boards as well as to the state and federal levels.

Meeting Adjourned until Wednesday morning.

Wednesday, 8:35 a.m.

T.Lomax: Displayed and explained the table. We ran scenarios using various congestion thresholds at levels better than LOS F – there was not much change in the overall percentages doing this compared to the scenarios we ran in the workshop on yesterday.

Discussion about consistency of data and applicability.

M.Morris: We need to pay attention to consistency with the TMMPs and introduce congestion magnitude through the weighting process. I think we should leave it at the serious level and be consistent and worry about weights to achieve equity.

Unknown: What about consistency between Categories 2 & 3?

J.Foster: I believe the charge to Category 3 workgroup will be to furnish a weighting of the factors considered by Category 2. We do not expect that they will be adding factors, but expect that they will give different weights to the factors.

Unknown: Is there a consistency aspect with the TCI (Texas Congestion Index)?

D.Casteel: They are all measuring the same thing. Someone is being charged with reviewing TMMPs and providing some consistency to the legislature.

J.Cantalupo: If we include roads which are not so congested, they provide consistency. This approach allocates money to prevent a problem or keep the problem from getting worse.

Unknown: If we're (Category 2) 80 percent of the action why do we get only 65 percent of the total mobility money?

Unknown: Category 3 can claim preventive measures in their weighting.

M.Wade: The charge of this group is **not** to determine the 65/10/35 breakout of the total available mobility dollars. If changes are made in the distribution between categories, it will be a Commission decision.

S.Warren: I don't see congestion as being a serious element in the Category 3 factors. Lubbock barely falls population-wise into a Category 2, and we have very little congestion. There will probably be a similar situation with all of the non-TMAs.

M.Morris: Everyone increases pretty proportionally in Category 2, so we could stay consistent with the TMMP and not worry so much about the rest of the process. Stick with serious congestion and accept what it produces.

D.Casteel: For Category 3, all three combined have a bit less congestion than Austin. One or two areas may have a little congestion. They will decide their own weights.

M.Wade: Can we conclude that we decided to use the serious level of congestion?

General agreement: Consensus was reached to use the "Serious" congestion threshold and to include congestion in the final equation.

J.Cantalupo: On Tim's table, why does Austin show only 7 percent of the state's congestion problem?

T.Lomax: Austin has some of the state's most congested roads, but the region has many fewer people and less travel than Houston or Dallas-Fort Worth. To allocate statewide money, I think you would want to show the percentage of the statewide problem. So the result is determined by the amount of extra time each traveler spends on the road AND by the number of travelers suffering that extra time. The amount of congested vehicle-miles of travel is a good estimate for those two components. .

Review of Jenny Peterman's adjusted tables. See Attachment F, Page 47

It was noted that we broke truck VMT out of total VMT and this was applied to the last table we looked at yesterday. Comparisons were made of calculations using total VMT with truck and total without truck. The results show little change. The group decided to use total VMT including trucks

General consensus was reached to use total VMT.

S.Warren: Reminder that one purpose was to figure out how Houston can get more funding. I know I (Lubbock) will lose funds to help Houston, but that's ok I'm trying to figure out what I can go back home and present.

M.Morris: David challenged us with lane miles. We tried taking them out and I still think truck VMT can be taken out.

Can we go back to the original numbers and zero out lane miles to level out the Houston and Lubbock issues?

General: The group agreed to continue recognizing the goal of increasing distribution to the Houston area (to address congestion), while minimizing the negative distribution impact on the smaller MPOs.

General: Using the current rounded up table, tests were run taking out lane miles and keeping much the same but increasing areas that will help smaller MPOs.

It was agreed yesterday that we will calculate only on the official MAB boundary.

W.Dennis: If an MPO wishes to change boundaries, they should send the new data to Jim Randall. TPP will prepare a minute order and the commission will have to approve the revised MAB. When the monies are allocated, then the calculations will be made on the official MAB boundaries at that time.

General: We go back home and take the factors and collect data to turn in; and it can be checked independently to confirm (2000 population and area), then this data can be added.

We can send the data for update to Jim Randall and copy on all present for their information.

J. Peterman: Please send us the email addresses for everyone to all present here.

We will take extra counties (those with partial area) out to get a worst case scenario at San Antonio's request.

The results were compared to previous figures and everyone increased except San Antonio and Dallas. This provides an argument for persuading the rural areas to be included in the MAB.

J.Cantalupo: I am concerned that this has not been a helpful process because everyone's percentages seem to be going down.

M.Morris: Explained the purpose of working to help the state, and not alienate any areas of the state so we need to be as equitable as possible, correct areas, introduce congestion, and reach consensus on weightings

A.Canon: I suggest that we need updated population if we are using current VMT. We should have the most current data available.

G.Johnson: As a test, zero out population and see what result is.

M.Morris: I think our policy should be to use the most current data available in each factor. The data must be official, even if it is a census estimate. [He noted that the rest of the data is largely estimated.]

The suggested test run and total VMT was increased up to 52 percent. The group noted that this run did not really prove anything.

A second test was run using most current Texas State Data Center population estimates (2007). It was concluded that Census estimates were preferred instead of TSDC data.

BREAK while the data was obtained from the census website and entered in to the calculations.

Census data numbers and state data center numbers were both entered. The State Data Center numbers were higher for some MPO areas.

Tweaking the Weightings

M.Morris: Suggested reducing congestion to 10 percent, adding back lane miles, it helped everyone but Houston and San Antonio.

Group: Made lane miles 5 percent and congestion 15 percent, and Lubbock still not increased enough.

Group: Dropped population by 5 percent and add to congestion, still hurt Lubbock and San Antonio.

Group: Congestion at 15 percent, increase lane miles by 5 percent (10 percent) still hit San Antonio and El Paso pretty hard.

Unknown: They could improve their situation by adding to their MABs and correcting their boundaries.

M. Morris: If we can all go home from here with the agreement that we need to update our boundaries, and have that focus, then this is an accomplishment. If our individual numbers decrease, we need to admit we were lucky to have gotten what we did up until now.

A.Canon: Lubbock will not improve because they don't have the option to bring in other areas, and they have the smallest percentage anyway. That will be hard to defend when Steve explains to his MPO.

Unknown: Yes, the other areas may change as they update boundaries, but only if they get their proposals in before the next UTP allocations are made.

Unknown: Commission wants to see some weighing in on how the funds are moved around. Some areas think they were taken--El Paso for instance. If the "deals" are made, then it has to be very transparent.

M.Morris: Addressing David's three suggestions,

- We included congestion
- Turned down idea of two buckets
- Recommend creating a means to trade funding (trade fair idea) and a bank needs to be established.

Unknown: Can we establish discussion on a local level then come to the state?

Unknown: Who will do the accounting and keep everyone accountable, protecting those who sit back.

M.Wade: The MPO who allows their project to move back in a letting is not losing anything because the project is not ready to let and they can't use the money at that time anyway. As previously discussed, an MPO who voluntarily moves a project back in letting because they are not ready to go does not necessarily deserve to be compensated. If an MPO allows its project to be moved back in letting when it is ready to go just to accommodate another MPO, then you are saying that they should be rewarded because this moving back in time will cost them an increased amount due to inflation.

Unknown: The number of projects as well as the costs has to be considered.

The reality is that the market controls the cost and they cannot always be estimated and forecasted.

Unknown: The whole idea of accountability may not be enforceable because the funds are not available.

Unknown: Some of the projects will not have to be funded out of Category 2 funds only. For instance, the bridge in Corpus will be funded out of State Interstate Funds because a portion is part of a Hurricane Evacuation Route.

Lets do weights as suggested but come back and see how it works.

Equity concern is an important issue TxDOT needs to present back to the group--how this would be kept track of related to revenue. A methodology and an information system also are needed.

Group: Looked back at weightings for a new formula:

2007 census pop	17%
2007 Population below poverty	7%
2007 crash data	7%
2007 Total VMT on- & off-system	30%
2007 Lane miles	10%
2007 Truck VMT	14%
2006 Congestion	15%

The following table summarizes the last five scenarios considered and evaluated by the work group:

Table of scenario criteria levels

Criteria						
Population	22	22	22	17	17	
Population below poverty level	7	7	7	7	7	
Fatal and incapacitating crashes	7	7	7	7	7	
Lane Miles	0	10	5	5	10	
Total VMT (on and off system)	30	30	30	30	30	
Truck VMT	14	14	14	14	14	
Congestion	20	10	15	20	15	

The following table indicates trial population estimates by counties (these will be adjusted to include only population inside the MAB.

Table of 2007 population estimates

TMA	County	State Data Center	U.S. Census Bureau
Austin	Hays	137,940	141,480
	Travis	943,726	974,365
	Williamson	359,979	373,363
Corpus Christi	Nueces	319,222	321,135
	San Patricio	69,559	68,520
Dallas-Fort Worth	Collin	717,439	730,690
	Dallas	2,359,595	2,366,511
	Denton	606,428	612,357
	Ellis	142,270	143,468
	Rockwall	74,034	73,810
	Tarrant	1,690,517	1,717,435
El Paso	El Paso	751,588	734,669
Lubbock	Lubbock	255,168	260,901
Hidalgo County	Hidalgo	723,433	710,514
Houston	Brazoria	291,729	294,233
	Chambers	32,664	28,771
	Fort Bend	503,315	509,822
	Galveston	285,484	283,987
	Harris	3,899,122	3,935,855
	Liberty	77,382	75,434
	Montgomery	412,665	412,638
	Waller	39,439	35,933
San Antonio	Bexar	1,569,794	1,594,493

Consensus was reached to use the Governor-approved MABs as they exist at the time of funds distribution for the geographic boundaries to determine formula inputs.

M.Wade: You have decided that everyone is going to go home and gather most current data on partial counties in their MAB and send to Jenny Peterman. My understanding is that you want to furnish the data (including partial counties) for as many of the factors as you can on the individual elements of the equation for your MAB. If there are data elements that you can not come up with, or some that you are uncomfortable in using, then TPP will calculate those elements based on the percentage of the partial counties which you furnish them.

W.Dennis: Send this data to Jim Randall, Wayne Dennis, and Jenny Peterman and copy everyone else. TPP will verify the data and Jim can present to the Administration and Commission.

Unknown: What's our next step?

IV. and V. Report Development and Recommendation Process

M.Wade: Our next steps will be to compose the notes that have been taken here over the last two days. We will send these to work group members to review and comment on. Please furnish your comments and suggestions to me. While you are reviewing the notes, we will begin working on a formal report. You will also have an opportunity to review the draft report and offer comments and suggestions on it as well. After we have prepared the final report, it will be furnished to TxDOT staff for review by the Administration and possibly by the Commission.

M.Wade: I will review our conclusions at this time:

- All geographic data will be based on what is included in the MAB
- Consensus was reached to use the 2007 U.S. Census Bureau population estimates for the population criteria.
- Consensus was reached to use the "Serious" congestion threshold and to include congestion in the final equation.
- Consensus was reached to use total VMT.

Consensus was reached on a final equation recommendation:

- 2007 Census Population 17%
- 2000 Population below poverty level 7%
- 2007 Fatal and Incapacitating crashes 7%
- 2007 Total VMT (on and off system) 30%
- 2007 Lane Miles 10%
- 2007 Truck VMT 14%
- Congestion 15%

Wade: It is my conclusion that we have addressed the three suggestions offered by David Casteel for consideration by the work group?

- Congestion – the workgroup agreed to include congestion as an added criterion in the formula.
- Creating two groups of funding (one for the TMA5 over 3 million population and one for the others) – the workgroup agreed to keep one funding group for all TMAs.
- Equity fairness for future value of money when project lettings are moved around among years and MPOs – the workgroup agreed that they liked the basic idea of equity fairness and Districts being able to advance projects and keeping track of expenditures. The group requested that TxDOT propose a process, including the mechanics of how it would work, develop an information system to support keeping track of expenditures, and hold overall expenditures by District to their allocations.

ATTACHMENT A

AGENDA UTP Category 2 Work Group Meeting July 22-23, 2008 Embassy Suites North – Austin

m-wade tti fn=c:/UTP/agenda 7.22.08

- I. Charge and Comments to Work Group – David Casteel
- II. Background – Bill Frawley
- III. Past Allocations Review and Issues – Montie Wade and Jenny Peterman
- IV. Possible Congestion Factor Process – Tim Lomax
- V. Re-evaluation of Individual Elements of Category 2 Distribution Equation – Work Group
- VI. Develop Recommendations for Report to TxDOT Administration – Work Group
- VII. Establish Process and Time Schedule for Report Review and Approval by Work Group

ATTACHMENT B

ATTENDEE ROSTER & CONTACT INFO UTP Category 2 Work Group Meeting July 22-23, 2008 Embassy Suites North – Austin

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Cantalupo	Joseph	Director	joe.cantalupo@campotexas.org	512-974-6441
Casteel	David	Asst.Exec.Dir.for Dist.Operations	dcasteel@dot.state.tx.us	512-305-9503
Clark	Craig	District Engineer	cclark3@dot.state.tx.us	361-808-2275
Collins	Ed	Adv. Transp. Planning Director	ecolli0@dot.state.tx.us	512-832-7041
Court	Carol	Sr. Office Assoc.	c-court@tamu.edu	817-462-0532
Dennis	Wayne	Deputy Director-TPP	wdennis@dot.state.tx.us	512-486-5004
Frawley	Bill	Research Scientist	w-frawley@tamu.edu	817-462-0533
Geiger	Jeanne	Deputy Director	geiger@sametroplan.org	210-227-8651
Gilyard	Roy	Director	rgilyard@elpasompo.org	915-591-4735
Hagquist	Ron	Researcher	rhagquis@dot.state.tx.us	512-416-2343
Johnson	Ashby	Deputy MPO Director	ajohnson@h-gac.com	713-993-4585
Johnson	Gabriel	Director of TP&D	gjohnso@dot.state.tx.us	713-802-5031
Jones	David	Director of Transportation	djones@mylubbock.us	806-775-1761
Leos	Gerardo	APD Engineer	gleos@dot.state.tx.us	915-790-4262
Lomax	Tim	Research Engineer	t-lomax@tamu.edu	979-845-9960
McCoy	Maureen	Assistant Director	maureen.mccoy@campotexas.org	512-974-2656
Morris	Michael	Transportation Director	mmorris@nctcog.org	817-695-9241
Mosley	Mark	Program Engineer	Mmosley@dot.state.tx.us	210-615-5812
Needham	Bubba	Director of TP&D	bneedha@dot.state.tx.us	512-832-7040
Niskala	Tom	Director of Transportation Planning	tomniskala@swbell.net	361-884-0687
Peterman	Jenny	Strategic Planner	jpeterm@dot.state.tx.us	512-486-5017
Riley	Bill	Director of TP&D	briley@dot.state.tx.us	817-370-6532
Wade	Montie	Program Director	montie-wade@tamu.edu	817-462-0531
Warren	Steve	Director of TP&D	wswarren@dot.state.tx.us	806-748-4490
Waskowick	Pat	Program Manager	pat.waskowick@h-gac.com	713-993-2474
Wells	Wayne	Director, Letting Mngmnt	wwells@dot.state.tx.us	512-416-2252

NOT IN ATTENDANCE:

Clark	Alan	MPO Director	a.clark@h-gac.com	713-627-3200
Hale	Bill	District Engineer	whale@dot.state.tx.us	214-320-6110
Longenbaugh	Mark	Director of TP&D	mlongen@dot.state.tx.us	915-790-4240
Martinez	Sid	MPO Director	IMARTINEZ@sametroplan.org	210-227-8651
Smith	Clay	Director of TP&D	csmith1@dot.state.tx.us	210-615-5920

Category 2 Funding Allocations

Background – First 5 Years

William E. Frawley, AICP
Texas Transportation Institute

The History

- Corridor Guidelines Workgroup (CGWG) met in 2002
- Developed charges for each category
 - Rural (Category 4)
 - Small Urbanized (Category 3)
 - Large Urbanized (Category 2)

The History

- New UTP Categories
 - New Category 2
 - 1 – High Priority IH Corridors
 - 3A – NHS Mobility
 - 3B – Texas Trunk System
 - 3D – NHS Traffic Management Systems
 - 8D – Texas FM System Expansion
 - 13A – State Funded Mobility
 - 13B – Hurricane Evacuation Routes
 - 13C – Border Trade Transportation Project
 - 15 – Congressional high Priority Projects
 - 17 – State Principal Arterial Street System
 - 18 – Candidate Turnpike Projects
 - Includes projects in TMAs that have both local and statewide interest – such as Katy Freeway in Houston

The Charge

- Develop a Funding Distribution for the 8 TMAs
- Create Three 5-Year Increments of Projects

The Team

- TxDOT Divisions
 - TPP
 - DES
 - Other Guest Presentations
- TxDOT Districts
 - CRP
 - DAL
 - FTW
 - HOU
 - PHR
 - LBB
 - ELP
 - AUS
 - SAT
- MPOs
 - Austin
 - El Paso
 - Houston
 - Corpus Christi
 - Lubbock
 - San Antonio
 - Dallas-Fort Worth
 - Hidalgo County

The Team

- Districts
 - Various positions
- MPOs
 - Staff directors
 - Policy committee members
- One vote per entity

The Process

- Several Workshops – 2002-2003
- Agreed to let each TMA create its corridor weighting/prioritization system
- Group had common interest in making sure each TMA would have projects
 - In final list
 - In first 5-year increment

The CGWG Issues

- Traffic Engineering Issues
 - Traffic volumes
 - Vehicle miles traveled
 - Travel time/delay
 - Level of service/capacity/access management
 - Safety
 - Percent trucks

The CGWG Issues

- Financial Issues
 - Economic development
 - Leveraging and/or tolls
 - Benefit-cost
- Special Significance Issues
 - International traffic/ports of entry
 - Military or national security installations
 - Tourism and/or recreational areas
 - Major freight routes
 - Air quality/conformity

The CGWG Issues

- Connectivity Issues
 - Closing system gaps
 - Connect with principal roadways from adjacent states
 - Intermodal connectivity
 - Fit with other TxDOT development
 - Maximize the use of existing transportation system

Local vs. Statewide Criteria

- Several iterations of statewide criteria ideas
- Workgroup came to consensus
 - No fair way to compare/score corridors in different areas against each other
 - Let each area develop its own corridor prioritization process

Geographic Funding Fairness

- Workgroup recognized importance of ensuring that each area would receive equitable funding
- Workgroup went through several iterations of how to distribute funds
 - Rounds of discussion and voting
- Agreed to limit criteria to those for which data were readily and consistently available

Geographic Funding Fairness

- Workgroup nominated and disqualified criteria
- Several straw poll votes
- Developed final list of criteria
- Voted on weighting scale
 - Each entity voted with percentage the wanted for each criteria
 - Averages used to develop final weightings

Geographic Funding Fairness

- Final Recommendation
 - Truck VMT (14.06%)
 - Population (22.19%)
 - Lane miles of on-system roads (16.88%)
 - Fatal and incapacitating crashes (6.56%)
 - Percent of population under poverty (6.88%)
 - Total VMT (on and off system) (32.50%)

Corridor List Recommendation

- Final result of workgroup efforts
- Very cooperative process
- Three 5-increments groups
 - Increments – not years
- Corridors – not projects

Other Recommendations

- Reconvene Workgroup in Five Years
 - Here you are!
- DEVELOP Authority to First Five Increments

Category 2 Work Group

Congestion Factor Consideration

Tim Lomax, TTI
t-lomax@tamu.edu

Basic Philosophy

- Similar to Mobility Plans
- Focus on congested locations
- Estimate the amount of congested travel
- Factor:
 - Amount of travel above congestion threshold
 - Vehicle-miles of travel on all major roads
 - Organize by urban/rural & County

How Was Congestion Criteria Developed?

- Congestion levels based on TxDOT Quality of Flow values and Urban Mobility Report
- “Freeways” includes tollways (assumes electronic toll collection)
- “Streets” – Based on divided streets

What Road Systems Are Included?

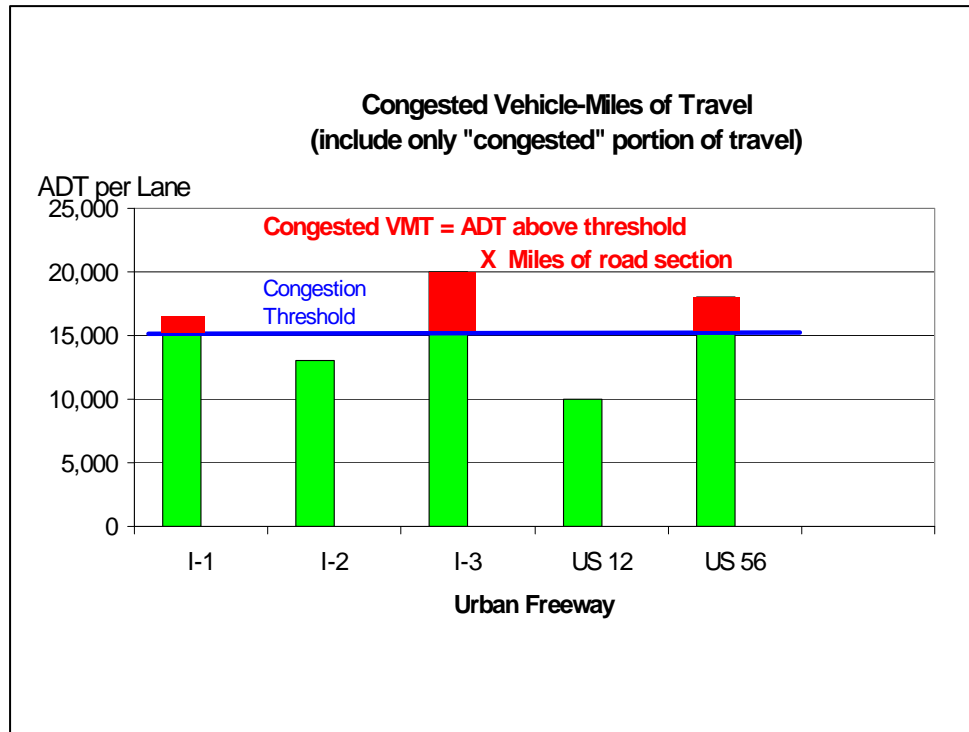
- All jurisdictions
- Roads within boundary (MAB)
- All limited access roads
 - Freeways, Tollways
- All major streets
 - Principal arterials
 - Minor arterials
 - Frontage roads
 - Divided, undivided, two-way left turns, etc.

Congestion Levels (ADT per lane)

Road & Area	HPMS FC #	Serious (LOS F)	Heavy (LOS E-F)	Moderate (LOS E)
Urban				
Frwy	11,12	16,000	14,500	13,000
Street	14,16	5,500	5,000	4,500
Rural				
Frwy	01	10,000	9,000	8,000
Street	02,06	4,500	4,000	3,500

Congestion Level Targets (ADT per lane)

Road & Area	HPMS FC #	Extreme (LOS BAD)	Severe (LOS F+)	Serious (LOS F)
Urban				
Frwy	11,12	25,000	20,000	16,000
Street	14,16	10,000	8,000	5,500
Rural				
Frwy	01	15,000	12,500	10,000
Street	02,06	7,500	6,000	4,500



Serious Congestion (LOS F) Category 2

- Austin 7.48%
- Corpus Christi 0.81%
- Dallas-Fort Worth 36.17%
- El Paso 2.34%
- Hidalgo 2.37%
- Houston 38.19%
- Lubbock 0.37%
- San Antonio 12.26%

ATTACHMENT E – Work Group Trial Scenarios

	Current Formula	Took out the MSA counties not in MAB (2000 Pop)	NEW 2008 Calculated Percentage		% change Current to New
CAMPO	9.263%	8.735%	9.065%	-0.198%	-2.139%
CORPUS CHRISTI	3.292%	3.369%	2.976%	-0.316%	-9.587%
EL PASO	4.661%	4.142%	4.030%	-0.631%	-13.534%
HIDALGO	3.806%	4.140%	4.074%	0.268%	7.054%
HGAC	29.502%	31.125%	34.214%	4.712%	15.970%
LUBBOCK	1.996%	1.991%	1.703%	-0.293%	-14.681%
NCTCOG	36.320%	35.463%	34.166%	-2.155%	-5.933%
SAN ANTONIO	11.159%	11.034%	9.772%	-1.388%	-12.436%
Total -	100.000%	100.000%	100.000%	0.000%	

	Current Formula	Took out the counties (2000 Pop)	17/77/0/10/30/14/15
CAMPO	9.263%	8.735%	9.065%
CORPUS CHRISTI	3.292%	3.369%	2.976%
EL PASO	4.661%	4.142%	4.030%
HIDALGO	3.806%	4.140%	4.074%
HGAC	29.502%	31.125%	34.214%
LUBBOCK	1.996%	1.991%	1.703%
NCTCOG	36.320%	35.463%	34.166%
SAN ANTONIO	11.159%	11.034%	9.772%
Total -	100.000%	100.000%	100.000%

	Current Formula	Took out the counties (2000 Pop)	22/77/0/10/30/14/10		% change Current to New
CAMPO	9.263%	8.735%	9.146%	-0.117%	-1.264%
CORPUS CHRISTI	3.292%	3.369%	3.053%	-0.239%	-7.252%
EL PASO	4.661%	4.142%	4.132%	-0.529%	-11.341%
HIDALGO	3.806%	4.140%	4.168%	0.362%	9.517%
HGAC	29.502%	31.125%	33.930%	4.428%	15.008%
LUBBOCK	1.996%	1.991%	1.763%	-0.233%	-11.669%
NCTCOG	36.320%	35.463%	34.118%	-2.202%	-6.063%
SAN ANTONIO	11.159%	11.034%	9.689%	-1.471%	-13.179%
Total -	100.000%	100.000%	100.000%	0.000%	

	Current Formula	Took out the counties (2000 Pop)	MM sugg. With 2007 census pop	difference between Current & New	% change Current to New
CAMPO	9.263%	8.735%	8.786%	-0.477%	-5.151%
CORPUS CHRISTI	3.292%	3.369%	2.508%	-0.783%	-23.796%
EL PASO	4.661%	4.142%	3.959%	-0.702%	-15.063%
HIDALGO	3.806%	4.140%	3.841%	0.035%	0.917%
HGAC	29.502%	31.125%	34.867%	5.364%	18.183%
LUBBOCK	1.996%	1.991%	1.363%	-0.633%	-31.706%
NCTCOG	36.320%	35.463%	34.691%	-1.629%	-4.485%
SAN ANTONIO	11.159%	11.034%	9.984%	-1.175%	-10.529%
Total -	100.000%	100.000%	100.000%	0.000%	

	Current Formula	Took out the counties	MM suggestion take out partial counties	difference between Current & New	% change Current to New
CAMPO	9.263%	8.735%	8.632%	-0.631%	-6.812%
CORPUS CHRISTI	3.292%	3.369%	2.591%	-0.701%	-21.286%
EL PASO	4.661%	4.142%	4.054%	-0.607%	-13.027%
HIDALGO	3.806%	4.140%	3.793%	-0.013%	-0.339%
HGAC	29.502%	31.125%	34.809%	5.307%	17.988%
LUBBOCK	1.996%	1.991%	1.399%	-0.597%	-29.916%
NCTCOG	36.320%	35.463%	34.662%	-1.658%	-4.566%
SAN ANTONIO	11.159%	11.034%	10.060%	-1.100%	-9.853%
Total -	100.000%	100.000%	100.000%	0.000%	

	Took out the counties	MM starter 22/7/7/30/0/14/20	difference	% change
CAMPO	8.735%	8.226%	-0.508%	-5.821%
CORPUS CHRISTI	3.369%	2.462%	-0.907%	-26.914%
EL PASO	4.142%	3.875%	-0.267%	-6.456%
HIDALGO	4.140%	3.634%	-0.506%	-12.219%
HGAC	31.125%	33.269%	2.144%	6.887%
LUBBOCK	1.991%	1.332%	-0.659%	-33.089%
NCTCOG	35.463%	35.945%	0.482%	1.358%
SAN ANTONIO	11.034%	11.257%	0.222%	2.013%
Total -	100.000%	100.000%	0.000%	

	Took out the counties		NEW 2008 Calculated Percentage	difference	% change
CAMPO	8.735%		8.010%	-0.725%	-8.302%
CORPUS CHRISTI	3.369%		2.095%	-1.274%	-37.814%
EL PASO	4.142%		3.522%	-0.620%	-14.969%
HIDALGO	4.140%		3.337%	-0.802%	-19.381%
HGAC	31.125%		34.431%	3.306%	10.620%
LUBBOCK	1.991%		1.116%	-0.874%	-43.917%
NCTCOG	35.463%		35.995%	0.532%	1.500%
SAN ANTONIO	11.034%		11.493%	0.458%	4.154%
Total -	100.000%		100.000%	0.000%	

	Current Formula		Took out the counties	difference	% change
CAMPO	9.263%		8.735%	-0.529%	-5.707%
CORPUS CHRISTI	3.292%		3.369%	0.077%	2.350%
EL PASO	4.661%		4.142%	-0.518%	-11.122%
HIDALGO	3.806%		4.140%	0.334%	8.772%
HGAC	29.502%		31.125%	1.623%	5.501%
LUBBOCK	1.996%		1.991%	-0.005%	-0.253%
NCTCOG	36.320%		35.463%	-0.857%	-2.360%
SAN ANTONIO	11.159%		11.034%	-0.125%	-1.120%
Total -	100.000%		100.000%	0.000%	

	Took out the counties		37.5% congestion 0 lane miles	difference	% change
CAMPO	8.735%		8.010%	-0.725%	-8.302%
CORPUS CHRISTI	3.369%		2.095%	-1.274%	-37.814%
EL PASO	4.142%		3.522%	-0.620%	-14.969%
HIDALGO	4.140%		3.337%	-0.802%	-19.381%
HGAC	31.125%		34.431%	3.306%	10.620%
LUBBOCK	1.991%		1.116%	-0.874%	-43.917%
NCTCOG	35.463%		35.995%	0.532%	1.500%
SAN ANTONIO	11.034%		11.493%	0.458%	4.154%
Total -	100.000%		100.000%	0.000%	

	Took out the counties		25% congestion	difference	% change
CAMPO	8.735%		8.349%	-0.386%	-4.414%
CORPUS CHRISTI	3.369%		2.708%	-0.662%	-19.639%
EL PASO	4.142%		3.697%	-0.446%	-10.755%
HIDALGO	4.140%		3.687%	-0.453%	-10.939%
HGAC	31.125%		32.989%	1.863%	5.986%
LUBBOCK	1.991%		1.568%	-0.422%	-21.223%
NCTCOG	35.463%		35.650%	0.187%	0.528%
SAN ANTONIO	11.034%		11.352%	0.318%	2.881%
Total -	100.000%		100.000%	0.000%	

	Took out the counties		50% congestion	difference	% change
CAMPO	8.735%		7.972%	-0.763%	-8.738%
CORPUS CHRISTI	3.369%		2.075%	-1.294%	-38.399%
EL PASO	4.142%		3.250%	-0.892%	-21.544%
HIDALGO	4.140%		3.251%	-0.889%	-21.478%
HGAC	31.125%		34.790%	3.664%	11.773%
LUBBOCK	1.991%		1.171%	-0.820%	-41.187%
NCTCOG	35.463%		35.814%	0.351%	0.989%
SAN ANTONIO	11.034%		11.678%	0.643%	5.830%
Total -	100.000%		100.000%	0.000%	
	Took out the counties		Pop., Poverty, vmt, & congestion	difference	% change
CAMPO	8.735%		8.119%	-0.615%	-7.046%
CORPUS CHRISTI	3.369%		2.972%	-0.397%	-11.792%
EL PASO	4.142%		5.041%	0.898%	21.685%
HIDALGO	4.140%		5.213%	1.073%	25.916%
HGAC	31.125%		31.302%	0.177%	0.568%
LUBBOCK	1.991%		1.645%	-0.346%	-17.368%
NCTCOG	35.463%		34.699%	-0.764%	-2.154%
SAN ANTONIO	11.034%		11.009%	-0.026%	-0.232%
Total -	100.000%		100.000%	0.000%	
	Took out the counties		15% congestion & smoothed	difference	% change
CAMPO	8.735%		8.512%	-0.223%	-2.549%
CORPUS CHRISTI	3.369%		2.964%	-0.405%	-12.029%
EL PASO	4.142%		3.852%	-0.290%	-7.001%
HIDALGO	4.140%		3.822%	-0.318%	-7.685%
HGAC	31.125%		32.338%	1.213%	3.896%
LUBBOCK	1.991%		1.736%	-0.254%	-12.777%
NCTCOG	35.463%		35.560%	0.096%	0.272%
SAN ANTONIO	11.034%		11.216%	0.181%	1.644%
Total -	100.000%		100.000%	0.000%	
	Took out the counties		Population & VMT (both)	difference	% change
CAMPO	8.735%		8.649%	-0.085%	-0.977%
CORPUS CHRISTI	3.369%		3.010%	-0.359%	-10.669%
EL PASO	4.142%		4.086%	-0.056%	-1.357%
HIDALGO	4.140%		3.439%	-0.701%	-16.927%
HGAC	31.125%		31.184%	0.059%	0.190%
LUBBOCK	1.991%		1.591%	-0.400%	-20.092%
NCTCOG	35.463%		36.885%	1.421%	4.008%
SAN ANTONIO	11.034%		11.156%	0.121%	1.100%
Total -	100.000%		100.000%	0.000%	

	Took out the counties		Population, VMT (both) & Congestion	difference	% change
CAMPO	8.735%		8.295%	-0.440%	-5.033%
CORPUS CHRISTI	3.369%		2.463%	-0.906%	-26.904%
EL PASO	4.142%		3.649%	-0.494%	-11.921%
HIDALGO	4.140%		3.170%	-0.970%	-23.434%
HGAC	31.125%		32.975%	1.850%	5.943%
LUBBOCK	1.991%		1.286%	-0.704%	-35.388%
NCTCOG	35.463%		36.712%	1.248%	3.520%
SAN ANTONIO	11.034%		11.451%	0.416%	3.774%
Total -	100.000%		100.000%	0.000%	
	Took out the counties		VMT, Congestion	difference	% change
CAMPO	8.735%		8.360%	-0.375%	-4.293%
CORPUS CHRISTI	3.369%		2.400%	-0.969%	-28.767%
EL PASO	4.142%		3.283%	-0.860%	-20.756%
HIDALGO	4.140%		2.901%	-1.239%	-29.931%
HGAC	31.125%		33.077%	1.951%	6.270%
LUBBOCK	1.991%		1.152%	-0.839%	-42.140%
NCTCOG	35.463%		37.206%	1.743%	4.914%
SAN ANTONIO	11.034%		11.622%	0.588%	5.329%
Total -	100.000%		100.000%	0.000%	
	Took out the counties		dropped LM, CLM - Included congestion	difference	% change
CAMPO	8.735%		8.262%	-0.473%	-5.418%
CORPUS CHRISTI	3.369%		2.508%	-0.861%	-25.546%
EL PASO	4.142%		3.903%	-0.240%	-5.793%
HIDALGO	4.140%		3.648%	-0.492%	-11.886%
HGAC	31.125%		33.148%	2.023%	6.499%
LUBBOCK	1.991%		1.355%	-0.636%	-31.938%
NCTCOG	35.463%		35.949%	0.486%	1.369%
SAN ANTONIO	11.034%		11.228%	0.193%	1.753%
Total -	100.000%		100.000%	0.000%	

ATTACHMENT F - Scenario Summaries

	Took out the counties	NEW 2008 Calculated Percentage	difference	% change	25% congestion	37.5% congestion 0 lane miles	50% congestion	15% congestion & smoothed	Pop., Poverty, vmt, & congestion	Population & VMT (both)	Population, VMT (both) & Congestion	VMT, Congestion	dropped LM, CLM - Included congestion	Took out the counties
CAMPO	8.735%	9.065%	0.331%	3.784%	8%	8.010%	7.972%	8.512%	8.119%	8.649%	8.295%	8.360%	8.262%	8.735%
CORPUS CHRISTI	3.369%	2.976%	-0.393%	-11.663%	3%	2.095%	2.075%	2.964%	2.972%	3.010%	2.463%	2.400%	2.508%	3.369%
EL PASO	4.142%	4.030%	-0.112%	-2.714%	4%	3.522%	3.250%	3.852%	5.041%	4.086%	3.649%	3.283%	3.903%	4.142%
HIDALGO	4.140%	4.074%	-0.065%	-1.579%	4%	3.337%	3.251%	3.822%	5.213%	3.439%	3.170%	2.901%	3.648%	4.140%
HGAC	31.125%	34.214%	3.089%	9.923%	33%	34.431%	34.790%	32.338%	31.302%	31.184%	32.975%	33.077%	33.148%	31.125%
LUBBOCK	1.991%	1.703%	-0.288%	-14.465%	2%	1.116%	1.171%	1.736%	1.645%	1.591%	1.286%	1.152%	1.355%	1.991%
NCTCOG	35.463%	34.166%	-1.298%	-3.659%	36%	35.995%	35.814%	35.560%	34.699%	36.885%	36.712%	37.206%	35.949%	35.463%
SAN ANTONIO	11.034%	9.772%	-1.263%	-11.445%	11%	11.493%	11.678%	11.216%	11.009%	11.156%	11.451%	11.622%	11.228%	11.034%
Total -	100.000%	100.000%	0.000%		100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%

CAMPO	8%	8%	8
CORPUS CHRISTI	3%	3%	3
EL PASO	4%	4%	4
HIDALGO	4%	4%	4
HGAC	33%	33%	33
LUBBOCK	2%	2%	2
NCTCOG	36%	36%	36
SAN ANTONIO	11%	11%	11
Total -	100%	100%	101