

The undersigned, a minority of the Thoroughfare Planning Citizen Committee, not agreeing with the majority, desire to express their views in the matter of County thoroughfare planning and recommendations.

The work of the TPCC should be commended in important areas. Conducting traffic counts, identifying problems associated with growth and dialogue about perceived future needs are useful products of the TPCC Report. This minority opinion should not be construed as a personal criticism or implying a lack of time and dedication by members of the TPCC. Early in the process the possibility of differences of opinion was recognized, and it was agreed that a minority report would be appropriate to allow for differing viewpoints.

### **Summary:**

In response to the task given by Commissioners Court, the TPCC has proposed 15 mobility projects. The stated goal of this task was to identify existing and future mobility needs and propose solutions. The constraints included giving priority to existing roadways and rights of way.

In order to do this, the Committee, as non-professionals, tried to estimate load capacity projections. Accuracy in projection is necessary to identify mobility needs. In the case of this Report, the TPCC used its assumptions to recommend solutions. As the Report states:

*“These load projection maps formed the foundation of the model the Committee used to quantify its analysis and to determine the additional road capacity needed...Using this data, the Committee applied its knowledge of the community and made assumptions on how traffic patterns would be affected by population growth and improvements to the road system.”*

There were so many variables involved in this process that the Committee itself recommends that they not be relied on without further research. In spite of this admission of the need for further study, professional input, consultants and other caveats included in the Report, the recommendation is still made to *“immediately begin acting on the recommendations of this Report,”* adopting it as the county thoroughfare plan.

Time does not allow for a discussion of all the various projects recommended. The scope of projects with their undetermined costs and potential impacts has been problematic throughout this process. This minority opinion will address only one of the largest TPCC proposals and highlight the need for further work before a thoroughfare plan is adopted.

Addressing the need for a bypass around Boerne was perhaps the largest, and most contentious of all the projects. The primary reason cited for a bypass is to relieve congestion in Boerne. The TPCC spent over a year looking at various routes to accommodate this goal. After a year, some members reached the conclusion that it would require at least 9 major road projects to achieve an acceptable level of service for Main in Boerne.

The ‘NE Connector’, which is supposed to help “relieve congestion on Hwy 46 E, close in to Boerne,” is proposed as follows:

“Construct a [\*limited-access connector to the northeast of Boerne\*](#) from Highway 46 to IH 10 at Ranger Creek Road. This road would initially be a 4 lane major collector class road but could become a 4 lane arterial road with left turn lanes at intersections and 6 foot wide safety shoulders in the future.” (Four 12’ lanes with a 12’ turn lane and 12’ shoulders would only be 72’.)

*“Justification: Additional and significant road capacity is needed to handle the traffic on Highway 46 east due to projected population growth that is anticipated to occur, primarily in the un-incorporated areas of the county. This class road will enhance the grid network of roads around Boerne to serve local traffic needs specifically relieving the congestion on Highway 46 E close in to Boerne.*

There is no data that supports the idea that local traffic will require a 120’ roadway to travel to the north of Boerne and IH 10. One must ask what traffic, and where is their destination point? The Report itself states that the capacity for Adler in ten years with the anticipated growth and no new roads, would only reach 17%.

Traffic projections should be informed by Boerne’s Master Plan. The Plan places the location of a ‘Regional Center’ southwest of Boerne, along IH 10. This would be the location for a future Target and other large trip generators. The ‘NE Connector’ does not facilitate this. The Master Plan also recommends two ‘Community Centers,’ one on SH 46 East and the other at north Hwy 87 and IH 10. The obvious and intended destination point for developments to the east will be the SH 46 East ‘Commercial Center’. These centers were located with the goal of ‘capturing’ a certain statistical area for commercial sustainability. Schools are also located in this area. Information from Dr. Kelly indicates that Esperanza students will attend the new High School. Statistics indicate that 40% of residents in eastern Kendall County will commute south. These traffic patterns do not support the local need for a 120’ road to the northwest.

A review of the project tables and their anticipated impacts on various roadways shows the minor contribution the 120’ NE Connector is expected to have on congestion.

The tables found in ‘Data Collection and Analysis’, pages 1-7, presume to show how capacity would be improved by each project. These are more easily evaluated as a spread- sheet to grasp the progression of capacity calculated. The table shows nine road segments will be affected by a NE Connector. According to these numbers, the 120’ ‘highway bypass’, whose stated objective is to remove traffic from Boerne, is shown to only add the following percent of capacity improvements:

	Before Bypass	After	Net Gain
SH 46 E to East of Amman	44%	40%	4%
SH 46 E from Amman to Herff	108%	97%	11%
Main at SH 46 E to Blanco	58%	52%	6%
Main/Blanco to Johns Rd	89%	80%	9%
US 87 from Adler to 1376	52%	47%	5%
Adler to 1376	24%	22%	2%
1376 to IH 10	37%	34%	3%
474 north of Adler	27%	24%	3%
474 north of Blanco	19%	17%	2%

There are some important questions to ask concerning this. Foremost is, do these percentages, and their locations indicate that this is a solution to congestion on Main?

The table indicates that the largest gain would be 11% on the short stretch of SH 46 E between Herff and Amman. Sophisticated software such as CORSIMS or Synchro applied to this roadway and the Herff intersection would almost certainly give a clearer and more accurate picture of capacity needs. Even with all projects implemented this section of SH 46 E still remains at 82% capacity, according to the TPCC calculations.

It should be apparent that the ‘NE Connector’ will not solve the congestion issue that has been cited as the primary reason for its being built.

The Report continues about the ‘NE Connector’:

*“In the future, this route can also serve as the Highway 46 by-pass for traffic desiring to continue west on IH 10, should it be deemed necessary. As the proposed Esperanza development is platted, a 120 foot right-of-way will be needed to provide sufficient road bed.”*

The projection table above includes regional traffic traveling through Boerne. According to the figures given, the NE Connector would only add 6% capacity between 46 E and Blanco, the first stretch of Main that northbound regional traffic from SH 46 E would utilize. Only a portion of this 6% can be assumed to be northbound regional traffic. If relieving congestion isn’t accomplished by this route, what is? If it is simply a response to perceptions about trucks traveling on Main, two other routes have been designated for this. A comprehensive analysis of freight travel should be done to determine the need for this.

Standard state transportation studies include requirements similar to these from Oregon’s Transportation Department: identifying the percentages of local and through trips projected at least over a 20-year period on the bypass; percentages, volumes and impacts of freight truck traffic; and, average trips on the proposed bypass facility based on build-out of the comprehensive land use plan to determine if a bypass solution is appropriate and to identify the mobility problems that must be addressed over the long term.”

In conjunction with this recommendation, the TPCC, both in its Report and presentation in public hearings, has stated it recommends a future truck route be identified along FM 473 for regional traffic. Doug Hartzler, presenting the Report to the public in April, specifically stated that most traffic in Boerne, including truck traffic, had been identified as primarily locally generated, not regional. He also pointed out that the TPCC had identified FM 473 as a future regional truck route.

The Report also suggests a proposed road through central Kendall for ‘Mid-County Connectivity,’ “*with a 120’ right of way the potential exists for an arterial route, should it be needed in the future to route Highway 46 traffic around the more densely populated areas in the southern county.*”

Once again, this begs the question, if FM 473 is identified as the solution for regional truck traffic, then what evidence points this Report to the need for a 120’ ‘Mid-County

Collector' and a 120' 'NE Connector' to handle this self-professed modest amount of regional and truck traffic? The NE Connector needs to be dropped with the understanding that if future development in this sector warrants it, the continuation of a grid pattern for local traffic should be applied.

Aside from the NE Connector, other proposed projects that the TPCC is recommending immediate adoption of as a master thoroughfare plan, are almost certain to be greatly affected by more professional study.

After the rough draft for the report was completed, it was discovered that the City of Boerne had requested that TxDOT, through HDR/WHM, do a 'study of Hwy 87'. HDR presented their findings in a workshop on March 27<sup>th</sup>. The final draft of this report is due in a couple of months. They used CORSIM and Synchro software programs for this study. Synchro has the ability to 'model existing and future traffic conditions and present the impact of various design alternatives. It can evaluate scenarios that illustrate the impacts of future development and various access and lane configuration alternatives.' CORSIM is able to do a corridor simulation model.

HDR reported that Main St. would remain at a Level of Service 'C' (urban road), at its current state until 2011. When asked what is acceptable, they stated that a level of service 'D' was acceptable for urban roads and intersections such as the Bandera intersection. They do not base capacity needs simply on 'rush hour' levels, in order to not overbuild.

Their recommendations offered two alternatives that included:

- Eliminate 90+ on street parking spots
- Adding raised center medians with planned turn lanes and changing or consolidating driveways, particularly on the west side of Bandera across from Walgreen's
- Working on signal light progression
- Changing some current streets to 'one way' designation was also discussed.

This report showed that these improvements, *without any other additional road improvements or added capacity*, would produce acceptable capacity levels for Main Street until 2015-2020.

After a year of the TPCC Committee looking at millions of dollars in potential new road projects to accomplish this same goal, this information was important.

This professional study by HDR indicates that the application of certain alternatives would produce a significant capacity improvement that members of this Committee were either unable to calculate accurately, overlooked or had eliminated as an alternative for citizens to consider.

Why is this important? This would appear to be a viable option to relieve congestion on Main Street that should be part of a larger County and Citywide discussion. This should not be construed to mean that additional capacity or new roads are not necessary but, in order to weigh what is best for County citizens both in cost and effectiveness, they must be able to compare all the viable options. In spite of significant mobility improvement indicated by this HDR report, the TPCC Report recommends 14 other mobility projects,

placing some of these solutions for Main Street as the very last project. This is a decision that involves political issues and should be part of a citizen dialog and planning process.

(Note: At the request of the TPCC Co-Chairman, the Minority Opinion was drafted prior to the vote on the Committee's final Report. After Committee discussion, the proposed project for Main St. was moved to the top of the Future Projects list in the Majority Report. The Committee stated that due to the potential for this project to improve congestion on Main St., the model used to project capacity needs in the TPCC Report would be impacted. As a result, further study to determine actual capacity requirements and proposed projects is important. )

Members of the TPCC were repeatedly told that discussions about financing were not in the purview of the Committee. This was an area of concern to minority members. Lack of information about costs and methods of payment for these proposals prevents citizens and decision makers from evaluating and effectively prioritizing these various options.

In addition, excluding certain alternatives denies taxpayers the opportunity to choose how they want their money spent. Options to make some changes or improvements to Main St. or other existing roads should be weighed with alternative scenarios that impact historical homesteads, private property and change land use.

After being told that finances were neither the responsibility of this Committee or to be discussed, possible financing information was added to the final draft of the Report.

The TPCC recommends adoption of their Report as quickly as possible, in spite of significant problems. The rationale of: 1) adopting a thoroughfare plan quickly based on this Report; 2) conducting traffic impact studies; then 3) hiring a consultant, appears faulty. What are the implications of adopting a plan that by its own admission is not comprehensive enough in its scope; is based on limited knowledge, resources and ability and departs from standard procedures due to their level of complexity?

(Note: In the final TPCC deliberations, the recommendations to utilize a consultant or professional planner for joint planning by Boerne and the County as well as planning for SH 46, were deleted from the Report.)

A more accurate, cost responsible and equitable process for Kendall County citizens could be achieved in this order of recommendation:

1) Have the City and County conduct professional studies to determine the current and future potential capacities for key roads.

This work would allow for the complicated process of analyzing intersections and running various scenarios for land use and traffic patterns. One of the most critical roadways, Main in Boerne, is already under going study. This better supports one of the original mandates given to the TPCC to utilize existing roads wherever possible.

2) Using information from these studies, engage in a joint process to identify the most effective solutions, including ones identified by the TPCC. The costs of various options should be identified.

This is important to insure that all alternatives are considered and that further participation and prioritization by citizens is allowed. Given the political nature and community concern this process should be facilitated by an objective planner.

### 3) Adopt a Master Thoroughfare Plan

Adopting a master thoroughfare plan in this order will prevent several consequences that would be detrimental to the citizens of Kendall County. Roads on maps begin to create their own dynamic that impacts decisions by property owners. This approach has a proven history of creating a domino affect, influencing people's lives and decisions about their future. It creates anger, worry, grief and misunderstanding. It clouds people's property and raises questions of disclosure laws in selling real estate, which in turn raises issues of 'takings'. It fuels speculation for development, which leads to pressure on decision makers from speculators to follow through on 'suggested' routes that have not been supported by professional evaluation as to their need or environmental and other impacts. The urgency cited for an immediate need to preserve ROW should be evaluated more closely as to time frames and development agreements. This is urged as the main reason for adopting a plan now, and doing a more thorough analysis later. New developments associated with this concern are under the oversight of the City of Boerne. Traffic impact and feasibility studies will be conducted for these potential developments. There is no reason why this process cannot be integrated into a larger process of transportation planning.

These realities speak strongly to the need for a high standard of thoroughness, accuracy and credibility- qualities that the minority believes the TPCC Committee values for its neighbors. The Minority recommends that these studies take place first, then confirm correct solutions and finally, have the Court adopt a plan.

## **Supporting Discussions**

It is the view of this minority opinion that the TPCC recommendations should not be adopted as a County thoroughfare plan without a more comprehensive and professionally led planning process. Topics to consider are:

- Level of expertise and accurate evaluations
- Application of Boerne's Master Plan
- Environmental impacts

### **Expertise and evaluation**

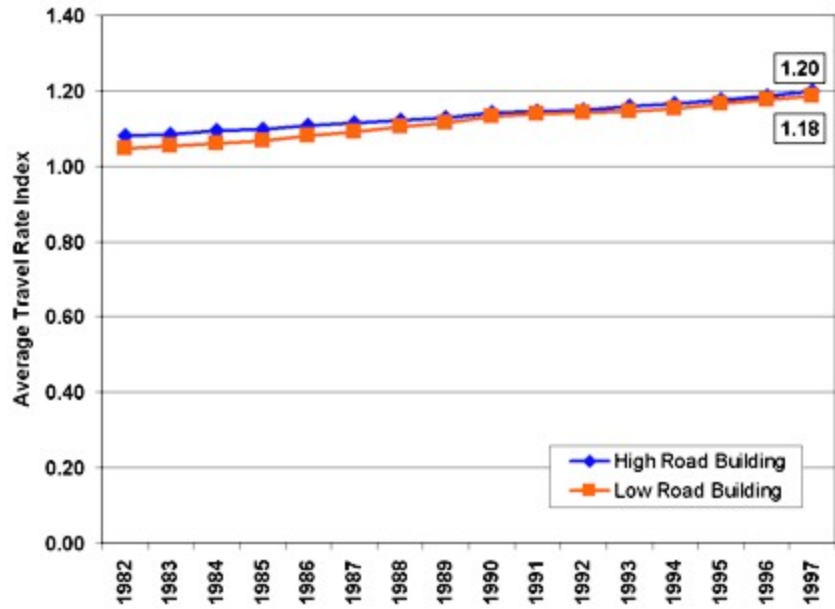
The level of expertise and resources necessary to study and design a comprehensive thoroughfare plan for a county such as ours is beyond the ability of this citizen committee. Kendall County is in a priority groundwater district and is experiencing great growth pressure. There are various approaches that may be used for mobility planning. The approach used by this committee most closely resembles a model of the past that looked at the trend, made projections for growth and then looked to build as much additional new roadway capacity as necessary in anticipation of this growth.

A second, more current approach takes the information about the projected trend and asks the question, "Now that we know what the problem is, what are all the possible solutions to this problem?" The distinction between these two models is important. One model uses only one answer to address mobility issues- more roadway. The second model begins by recognizing that there are several ways of addressing mobility needs and that only through a comprehensive land use and mobility planning process can true long term solutions be found.

A study from the Federal Highway Administration shows that for every 10% of capacity added, 5.3% is automatically lost by a phenomenon called 'induced traffic':

"TTI's data confirms induced traffic results. In the metro areas studied, a 10% increase in the size of the highway network has been associated with a 5.3% increase in the amount of driving. In other words, half of the new highway capacity has been filled with driving that would not have occurred if the road space had not been added. This is consistent with previous research on induced travel, including an FHWA sponsored study which found that when additional road capacity provides a 10% improvement in travel time, driving increases by 5%."

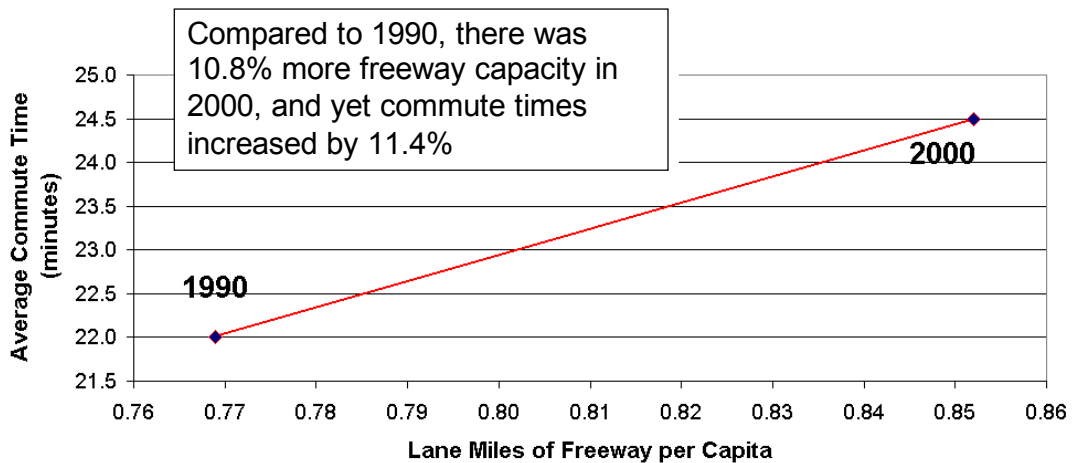
(See Table)



Other studies for San Antonio show that although there are more lane miles now than ever before, commute times are longer.

## Freeway Supply and Commute Times

### San Antonio, 1990 and 2000





These documented studies and others have led planners to recognize that without tying land use and transportation planning together, providing what they've termed 'accessibility', we will never build our way out of congestion. This model is advocated by leading transportation planners in the United States and its implementation is one of the top priorities identified by the Federal Highway Department for 2007. The Texas Transportation Institute has produced a report, training program and materials, in cooperation with TxDOT, entitled "Promoting Smart Growth Texas Style".

This report states:

"Smart growth is planned growth that integrates land use and transportation to create urban development that conserves resources and improves quality of life while providing adequate mobility."

"Moreover, smart growth can be viewed by transportation agencies as the land-use component of a 'smart' comprehensive transportation/mobility plan- a plan that arranges land use for more efficient use of transportation and improves compatibility between transportation and land use."

This level of quality in mobility planning and solutions requires the expertise of professional planners. Recognizing that this is a highly recommended and successful approach, it should be viewed as an easily attainable goal for Kendall County. The author of this report works for the Texas Transportation Institute at Texas A&M University.

An additional resource not available to this committee is sophisticated software that aids in the simulation and planning for potential traffic patterns created by different land use decisions. The work of the committee was limited to what might be considered 'intelligent guesswork' due to the complexity of determining traffic patterns. Using current traffic counts and patterns and giving consideration to where new developments are proposed, allows us to project to a certain extent where congestion could be expected to increase. However, these suppositions tended toward a subjective process and were limited by the unknowns of future placement of schools, stores and other destination points.

Which route will commuting parents use after dropping off students at school? How soon will a new middle or elementary school be built and where? Where will new residents shop for groceries? Since a Walmart generates 10,000 car trips a day, what happens to estimated traffic projections if a Target is built in the new 'regional center' south on IH 10? This one project could substantially change capacity projections for certain roads. Even with the placement of commercial zones in Boerne's new Master Plan, without appropriate resources, accurate calculation of complex driving patterns is debatable.

Below are standard tables used to calculate trip generations created by the many different types of developments.

**Table 3.1 Threshold Levels**

Land Use	100 Peak Hour Trips	750 Daily Trips
Residential: Single Family	150 units	70 units
Apartments	245 units	120 units
Condos/Townhouses	295 units	120 units
Mobile Home Park	305 units	150 units
Shopping Center	15,500 sq. ft.	2,700 sq. ft.
Fast Food Restaurant (GFA)	5,200 sq. ft.	1,200 sq. ft.
Convenience Store w/ gas (GFA)	1,300 sq. ft. or 5 pumps	
Bank w/ Drive-In	4,400 sq. ft.	2,800 sq. ft.
Hotel/Motel	250 rooms	90 rooms
General Office	55,000 sq. ft.	45,000 sq. ft.
Medical/Dental Office	37,000 sq. ft.	26,000 sq. ft.
Research & Development	85,000 sq. ft or 4.5 acres	70,000 sq. ft or 4 acres
Light Industrial	115,000 sq. ft. or 8 acres	115,000 sq ft. or 11.5 acres
Manufacturing	250,000 sq. ft.	195,000 sq. ft.

**HOW ARE TRIPS GENERATED CALCULATED?**

To calculate the number of trips expected to be generated by the proposed development in your community, apply the appropriate rate below to the proposed land use.

**Table 3.3 Trip Generation Rates**

Land Use	Base Unit	Rates		
		AM Peak	ADT	ADT Range
<b>Residential</b>				
Single Family Home	per dwelling unit	.75	9.55	4.31-21.85
Apartment Building	per dwelling unit	.41	6.63	2.00-11.81
Condo/TownHome	per dwelling unit	.44	10.71	1.83-11.79
Retirement Community	per dwelling unit	.29	5.86	
Mobile Home Park	per dwelling unit	.43	4.81	2.29-10.42
Recreational Home	per dwelling unit	.30	3.16	3.00-3.24
<b>Retail</b>				
Shopping Center	per 1,000 GLA	1.03	42.92	12.5-270.8
Discount Club	per 1,000 GFA	65	41.8	25.4-78.02
Restaurant				
(High-turnover)	per 1,000 GFA	9.27	130.34	73.5-246.0
Convenience Mart w/ Gas Pumps	per 1,000 GFA		845.60	578.52-1084.72
Convenience Market (24-hour)	per 1,000 GFA	65.3	737.99	330.0-1438.0
Specialty Retail	per 1,000 GFA	6.41	40.67	21.3-50.9
<b>Office</b>				
Business Park	per employee	.45	4.04	3.25-8.19
General Office Bldg	per employee	.48	3.32	1.59-7.28

Source: Institute of Transportation Engineers (ITE). Trip Generation.

These basic examples and the complexity of this process point to the wisdom of enlisting professional help and resources to determine comprehensive mobility solutions that encompass both land use and transportation planning. The use of software such as CORSIM and Synchro enable professionals to evaluate these complicated variables and scenarios.

As an example, San Marcos went through a professional master thoroughfare planning process in 2004. Their population was 44,769 and the city land area was 25.3 square miles. San Marcos is home to a large university, outlet malls, tourist attractions and has a large volume of regional traffic. Laurie Anderson, an engineer for San Marcos, said the entire process took nine to twelve months to accomplish. She states that the key component of their process was the ability of the planning firm to provide modeling. She identified this as key because of issues that involve smaller cities and needing to balance increased capacity on existing roads versus building new roads. Modeling allowed the community to look at all the options and alternatives in order to come to a consensus.

There are many qualified planners that could be considered. The argument that either the money is not available for a planning process, or it is unnecessary to do this, is readily dismissed with the realization that spending a little now may mean the difference in literally millions of dollars for roads that fail to solve our long term mobility needs.

Kendall County is a unique place geologically, historically and environmentally. It still maintains much of its agricultural economy, historical homesteads and buildings and contains important and beautiful rivers, creeks and watersheds. It ranks high in the State for the number of identified caves, due to its extensive karst system. These attributes make it both a tourist destination, and a fragile environment for massive development.

What a qualified professional can bring to this important context is a more comprehensive process that identifies those resources and priorities that the community considers important. A healthy and vigorous discussion in this community about the future vision for our county is needed. Questions about where our unique county stands in relation to regional growth pressures from San Antonio, future water supply, what impact concerns are legitimate for our aquifer, private property rights, how much importance we place on agricultural lands or open spaces and a healthy economy, all need to be identified and prioritized. Having an objective planner also insures that all viable alternatives are allowed for consideration and protects against potential conflicts of interest. Once these things are agreed upon, a process of future land use decisions and mobility solutions can be designed to support those priorities.

Given the expressed desire of voters in Kendall County to preserve natural and historic resources and maintain a rural feel, this professional level of planning is critical.

## Master Plan

Boerne's Master Plan was based on a "Smart Growth" concept. However, Gould Evans was instructed to develop the plan based on Boerne's existing Thoroughfare Plan. This approach 'put the horse before the carriage' because no feasibility, capacity needs, historical, community or natural resource impact studies had been done for this Thoroughfare Plan. Consequently, the pressure of future congestion from proposed development based on the city thoroughfare plan has created problems for environmentally sensitive areas of our watershed, historic homesteads and could lead to shifts in land use that would undermine the vision of citizens expressed in the Master Planning process.

What about the routes shown in the Master Plan? This is an important question and deserves some attention. The original draft of the Master Plan recommended that if a bypass were needed it should go south of Boerne or utilize Old San Antonio Road.

As professional planners, Gould Evans recognized three important points:

- 1) Commuters were traveling south to San Antonio
- 2) Bypasses can have a negative impact on a city's business economy if not planned properly and,
- 3) Bypasses require limited access and land use management to function properly.

As the Master Plan Ad Hoc Committee was finalizing their report, two members of the TPCC appeared before the Ad Hoc Committee and suggested a 'north Adler extension'. This was not discussed beforehand with the Committee and prior to approval of this route. Up until this time, the TPCC had been waiting for traffic counts to be completed and had focused most of its attention on areas in the southeastern part of the county. It is important to recognize that when this route was suggested to the Ad Hoc Committee, there had been no clearly identified need for this project or investigation of potential environmental or historical impacts. Essentially, this is still the status of this route. Members of the Ad Hoc Committee have indicated that they were given the impression that this route was being recommended and supported by the TPCC, and that need and

impact study to support it had been done. Consequently, the NE Connector was adopted without benefit of the following:

- A comprehensive understanding of traffic patterns and need
- Full traffic counts
- Data on the volume of regional traffic
- TPCC's additional recommendations of a 'Mid-County Connector'
- Designation of FM 473 for regional truck traffic
- Identification of historical and environmental features

Research for the Master Plan, as well as the TPCC, ACCOG studies, BISS data and TxDOT, identify southeast Kendall County as a primary area of current and anticipated growth. The following Report excerpts support Gould Evan's original evaluations:

**"The key point is that individual land owners are actively selling to developers...and the majority of this growth in the foreseeable future will occur in southern Kendall County near Boerne."**

**"...based on empirical observations, determined that trips in the county are 60% local trips and 40% commuter trips."** (These are working commuters going to San Antonio.)

**"...the establishment of the Hill Country Priority Groundwater Management Area in 1990 has direct implication in future land-use and, therefore, future mobility planning - primarily in the southeast quadrant."**

**"A water main, carrying surface water from the Western Canyon Lake project, enters Kendall County and runs parallel and south of Highway SH-46 East, terminating at the southeastern edge of the City of Boerne. The proximity of a primary state highway and this water line has important implications for future subdivision activity.**

**...At the time of this writing, a bill to create...Esperanza... is winding its way through the 2007 Legislative Session... Projected construction of almost 2,500 residential units and approximately 40 acres of commercial land uses will require mobility 'relief' along SH46 East, Amman Road, and down-road arterials and collectors."**

**"With significant growth projected to occur east of the City of Boerne, the current roadways are undersized to handle the projected 10 year load."**

This commuter demand remains significant, and should be anticipated to grow with the build out of the 'big box' area designated to the south of Boerne. Only good land use planning combined with additional capacity both on existing roads and possible additional routes south, will address this. Professional and environmental study is crucial to obtain the best solutions in this context.

## Environmental:

Any future road planning must include environmental impact studies and a thorough evaluation and understanding of the affects of development upon the Upper and Lower Glen Rose formations. The Master Plan for Boerne was based upon good urban planning models for Smart Growth. However, the Master Plan was not based on any in depth environmental study. Therefore, conceptual roads for the Master Plan were not based on environmental studies.

It is important to take advantage of the concepts behind the Master Plan for Boerne. The intent of this type of planning is to provide access to needs and reduce the number of trips necessary, therefore, minimizing the need for more and more roadways.

This is especially important for our aquifer dependent area. An understanding of the potential impacts on, and parameters of, the Lower Glen Rose, as well as critical karsts, streams and recharge features of the Upper Glen Rose, should inform where and how development and roads are placed.

From the outset of the TPCC there was a desire by some members to immediately begin putting routes on maps. It was argued by others that this should be delayed until traffic counts could be done. A few members encouraged inventorying environmental and historical impacts prior to route decisions.

Early in the planning process, a minority report member contacted Dr. George Veni, an expert hydrogeologist, in order to gain a better understanding of issues related to road impacts and the aquifer. The importance of groundwater and the potential for contamination from building and maintaining roads, hazardous spills, as well as possible new development along roads, appeared to be a priority to citizens. As a result of his input, this member encouraged identifying important karsts and recharge features in the area where a bypass route was being considered- the southeast quadrant of the county. For several weeks, members of the TPCC, who lived in this area and were part of the 'Boerne Relief Route' group, contacted landowners in the area and enlisted their help in identifying recharge features. A list was compiled with sinkhole locations. This was the primary area under discussion for a SH 46 bypass, based on TxDOT's original plans.

A TPCC member living in this southeast quadrant contacted Dr. Veni later as well. This member reported back to the TPCC, stating that information from this discussion supported a road going north and not south. Since no environmental study had been done for any other routes to determine what issues might be of importance, the minority member asked Dr. Veni to clarify. His comments follow:

"I have reviewed Mr. ----- minutes and ask that they not be accepted as an accurate record of my conversation with him. His minutes contain many significant errors that would take me at least a couple of hours to fix if I were to spend time revising his document. Please do not see this as anything negative about Mr. ----- . I was afraid this would happen because he is not a hydrogeologist and was asking for a lot of detailed information that he doesn't have the background to fully understand -- especially in the short time that we met. I'm certain I would make the same mistakes if I were interviewing someone for details in a field I'm not familiar with. Several errors are not in

the hydrogeology but I suspect resulted from general confusion on the hydrogeology that caused some misunderstanding of other points.”

“Please pass this message to him...”

“Your minutes of our meeting and general efforts to find the best way to decide on how to proceed with the highway construction have the best of intent. You have most of the general concepts of what I said, but missed on several details. Correcting what you wrote, and adding details for clarification, would take a couple of hours. And even if I did this, it would be a bare-bones assessment of my views that could still be misinterpreted because the supporting information for those views is not readily evident. For a truly clear description, you need a full fledged report, and I won't have time to do that...”

“The main points to be aware of relative to the proposed highway construction are:

- 1) The road will be located on either the lower member of the Glen Rose Formation or the upper member of the Glen Rose. The upper is not risk-free, but it is generally much less vulnerable to groundwater contamination and other environmental problems than the lower Glen Rose.
- 2) Several possible routes should be examined and should include detailed on-the-ground studies, such as searches for caves and karsts features. I expect there are hundreds of unreported and undiscovered caves and karsts features in the Boerne area. I strongly recommend Zara Environmental as the most qualified firm to do such cave and karsts work.
- 3) BMPs (best management practices) will not prevent groundwater contamination but they may help reduce contamination. Each type of BMP has different rates of effectiveness at filtering or capturing different contaminants. Also, typical filtration rates are only between 10-40% -- and that assumes the BMPs are properly maintained. Poor BMP maintenance is common in this area, which can make the BMPs effectively useless.”

With no investigation and little contact with landowners to determine environmental issues other than in the area of a possible southeast connector, the assumption was made that, based on environmental issues to the south, a 120' road should go north. This reasoning utterly fails to acknowledge that the demand and pattern for traffic traveling south has nothing to do with traffic needs to the north.

There are three creeks and their watersheds that the proposed 'NE Connector' would cross. Two of these run through downtown Boerne and empty into the Cibolo. Brown's Creek drains into the Cibolo as well. Other routes recommended by the TPCC will impact important areas such as the Balcones Creek area in southern Kendall. The Balcones fault line is an environmentally significant area due to its connection to the Edwards Aquifer.

BMPs, or best management practices, as described by Dr. Veni, do not appear to be reliable. What would be the consequences of a hazardous cargo spill within these

watersheds? What are the long-term effects of road building and maintenance in these areas? Dr. Veni's input indicates that the topography is such that general assumptions about the location of the Lower Glen Rose and its vulnerability shouldn't be made.

These concerns were neither explored nor answered. It is the opinion of this report that due to the disparity between the efforts spent 'discovering' environmental issues in the southeast in comparison to no environmental evaluation elsewhere, incomplete conclusions were reached. This also has the appearance of bias by gathering just enough information to build a case against routes being placed in certain areas.

If the need for a bypass is identified, Dr. Veni's recommendation for environmental studies should be followed.

In addition, any major widening of ROW on existing roads as well as the additional traffic induced by this widening needs to be evaluated for environmental impacts. Loss of tree cover has impacts beyond just aesthetics; and run off, air and noise pollution from traffic should be considered.

Historical features should be identified and protected as well. Preservation of historic homesteads and architectural details such as rock walls should be given proper consideration.

## **Conclusion**

These Minority views are based on consideration of concerns expressed by Kendall County residents and the potential impacts and consequences of adopting a thoroughfare plan prior to additional public participation and further objective and professional oversight of this planning process.

Respectfully Submitted,

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Barnard Dodson

TPPC Committee Members

May 18, 2007