

MINUTES FOR THE WEEKLY MEETING OF THE STEERING COMMITTEE ON TUESDAY, OCTOBER 14, 2008 AT 3PM AT THE WORKSESSION ROOM BUILDING F, JAMES CITY COUNTY GOVERNMENT CENTER.

PARTICIPANTS:

MEMBERS PRESENT:

Bill Porter
Julie Leverenz
Jack Fraley
Mary Jones
Vaughn Poller
George Billups
Chris Henderson
Mark Wenger

NOT PRESENT:

Joe Poole
James Nickols
Tom Tingle

STAFF PRESENT:

Tammy Rosario
Jose Ribeiro
Leanne Reidenbach
Jennifer VanDyke
Allen Murphy
Christy Parrish
Luke Vinciguerra

I. CALL TO ORDER

Ms. Tammy Rosario called the meeting to order at 3 p.m.

II. PUBLIC COMMENT

Ms. Rosario opened the public comment period. There were no speakers present.

Ms. Rosario stated there was some additional feedback provided in written form. Ms. Rosario stated Ms. Reidenbach will be passing around this input to be placed in the binders provided.

Ms. Rosario stated Ms. Reidenbach will answer any questions the Committee may have on the blog as well as provide updates.

Ms. Leanne Reidenbach provided a supplemental instruction sheet on blogging features. Previously the blog had a separate input section for each topic. Ms. Reidenbach stated there is now only one main blog with each comment having its selected subject marked. Ms. Reidenbach stated this function will make it easier to search and categorize comments.

Ms. Reidenbach stated the automatic notification for the blog is not working. Ms. Reidenbach stated that there is now an RSS feed for the blog that will feed into people's email blog comments as they are posted. Ms. Reidenbach provided a handout for RSS instructions. Ms. Reidenbach offered her assistance should anyone need further guidance with blogging.

Mr. Bill Porter asked for clarification as to where to place the public comments within the binder.

Ms. Reidenbach stated it should be placed with letters.

Ms. Rosario closed the public comment period.

III. MINUTES

Ms. Rosario conferred with Mr. Allen Murphy regarding the necessity of having a quorum for the minutes to be approved.

Ms. Rosario stated they will postpone approving the minutes.

IV. METHODOLOGY FOR TRANSPORTATION MODELING

Ms. Rosario invited Mr. Luke Vinciguerra to provide an overview of the materials being covered with the *Transportation Model*.

Mr. Vinciguerra stated that as part of the Comprehensive Plan update staff solicits the help of consultants to model future traffic conditions. Mr. Vinciguerra stated with the data, staff can see where future traffic problems may occur and anticipate solutions beforehand.

Mr. Vinciguerra introduced Mr. Bill Cashman of URS. Mr. Vinciguerra stated Mr. Cashman will discuss traffic demand modeling and describe the methodology being used to forecast future traffic.

Mr. Vinciguerra stated Mr. Bradley Weidenhammer, with VDOT will also be present during all the transportation meetings to assist with any questions the Committee may have for VDOT.

Mr. Cashman stated his objective as providing an idea to the group of what travel demand modeling is, how it is used in Hampton Roads, and its strengths and weaknesses. Mr. Cashman stated he will outline to the Committee the procedure of transportation modeling, including the scope, scale and timing. Mr. Cashman stated there are limitations to the model, and the model will not be appropriate to address each and every transportation issue.

Mr. Cashman stated he will review the tools available and the long range process.

Mr. Cashman stated the main tools for any locality to address transportation concerns are: the Comprehensive Plan, the Zoning Ordinance, the Capital Improvement Program, and Subdivision and Site Plan Ordinance. Mr. Cashman stated that each has its own strengths and weaknesses.

Mr. Cashman stated there are three different categorical scopes used: Regional, Jurisdictional, and, Corridor, District and Neighborhood.

Mr. Cashman stated the travel demand model is a mathematical simulation of travel behavior. Mr. Cashman stated this includes total trips determined by socioeconomic data and trips channeled over the road network.

Mr. Cashman reviewed a four-step modeling process: generation, distribution, mode split, and assignment.

Mr. Cashman provided a flow chart for the basis of the modeling and its rationale. Mr. Cashman stated the model incorporates data from the US Census Bureau and the Virginia Employment Commission aggregated into Transportation Analysis Zones (TAZ). Mr. Cashman stated the model uses calibrated 2000 census data. Mr. Cashman stated the calibration accounts for discrepancies anticipated in the population and employment forecast. Mr. Cashman stated after accounting for these discrepancies, the 2030 forecast can then be modeled.

Ms. Julie Leverenz asked if there has been an analysis of how dependable these forecasts are.

Mr. Cashman stated the models can be close, but complete accuracy cannot be achieved.

Ms. Leverenz asked how long this approach to modeling has been in use.

Mr. Cashman stated it has been in place since the mid-1960s.

Mr. Cashman explained a TAZ's (Traffic Analysis Zones). Mr. Cashman stated a TAZ is a geographic area that aggregates socioeconomic information and trip production and attraction. Mr. Cashman stated the smallest level of detail for the model output is the TAZ.

Mr. Porter asked if a TAZ remains static or if they may change.

Mr. Cashman stated TAZ's can be added, but generally they do not change.

Mr. Cashman provided an illustration of an existing TAZ in Virginia Beach. Mr. Cashman stated the TAZ will say nothing about any individual use or what goes on within the TAZ.

Mr. Porter asked if TAZ's are consistent with census blocks.

Mr. Cashman stated that it is.

Mr. Cashman provided an example of the socioeconomic data used to create the TAZ which include: population, registered vehicles, households, total employment, retail employment, and non-retail employment.

Mr. Cashman provided a map that illustrates all the TAZ's in James City County. Mr. Cashman stated within Hampton Roads there are approximately 1,480 TAZ's.

Mr. Chris Henderson asked if they are capable of looking at multiple jurisdictions. Mr. Henderson stated that due to significant shared boundaries with both the City of Williamsburg and Yorktown any traffic decisions made within the County will greatly impact other adjacent localities.

Mr. Cashman stated they will be using data from multiple jurisdictions.

Mr. Porter asked if this will split a census block.

Mr. Cashman stated that it would not usually break up blocks.

Mr. Cashman provided an illustration of the Hampton Roads Regional Model. Mr. Cashman stated the provided illustration includes the data that will be incorporated from other localities.

Mr. Cashman provided an illustration of the road network in James City County / Williamsburg area.

Mr. Cashman provided an illustration of how trips from TAZ's are added to the network.

Mr. Cashman stated TAZ relationships were developed based on a telephone survey conducted in the mid-1990s.

Mr. Cashman discussed the four-step process for trip generation. The characteristics are developed from a statistical sampling interview process. He stated data is used to develop trip generation and attraction equations. Mr. Cashman stated trips are stratified by purpose: home-based work, home-based other, and non home-based.

Mr. Cashman stated producers are developed using population, households, and autos. He stated TAZ trip attractions are developed using retail and non-retail employment. Mr. Cashman stated special generators are also accounted for including hospitals, colleges, and local attractions such as Busch Gardens.

Mr. Cashman stated the socioeconomic forecast is a one-shot process. Mr. Cashman stated the forecast model shown is only to the year 2030. Mr. Cashman stated there is no way within the model to test growth management strategies or to tie capital investment to policies. Mr. Cashman stated the James City County model will be modified to evaluate policy sensitive issues.

Mr. Cashman defined trip distribution as the allocation of trips to and from one zone to all other zones. He stated the gravity model is used to allocate trips to a given zone.

Mr. Cashman provided an illustration showing how each link in the Network is coded for the number of lanes as well as distance and speed.

Mr. Cashman described the gravity model. He stated attraction increases with size and decreases with distance. Mr. Cashman stated zones with higher numbers of attraction variables (employment) have a stronger tendency for trip attraction than those with lower numbers. Mr. Cashman stated the tendency of a zone to attract trips decreases with travel time from that zone to other zones. Mr. Cashman stated putting a parallel facility will redistribute trips increased.

Mr. Cashman stated the product of the Gravity Model is a table of trips to and from each of the 1,480 zones.

Mr. Cashman stated a Mode Split is only significant where extensive transit systems are available. Mr. Cashman stated that in Hampton Roads, transit serves less than one percent of total trips, making mode split a simple factoring process.

Mr. Cashman stated trip assignment is the process of routing (channeling) trips between TAZ's and, stated it considers traffic congestion when assigning trips. Mr. Cashman stated assignments can reflect travel under both congested and uncongested conditions.

Mr. Henderson asked how non-organic traffic that is outside of the model area is dealt with (i.e. tourists traveling into the area).

Mr. Cashman stated that this is considered when calibrating the model.

Mr. Porter asked how the calibrations would differ from one TAZ to another.

Mr. Cashman stated that you don't calibrate the use as much as the assignment on the network. As an example, Mr. Cashman stated the TAZ representing Busch Gardens uniquely reflects the high number of vehicles entering and existing.

Mr. Jack Fraley asked if the calibration also takes into account the passers-thru.

Mr. Cashman stated that it does.

Mr. Cashman provided an illustration showing that as I-64 volumes increase, speed decreases, and Military Highway becomes a more attractive route.

Mr. Cashman provided an illustration of the different classifications of Levels of Service (A, B, C, D, E, and F). Mr. Cashman stated that usually the goal is to achieve a “C” or “D” Level of Service.

Mr. Cashman showed a chart illustrating how as feet of separation (between cars) decreases vehicle speed decreases. Mr. Cashman pointed out that around Level of Service “D” vehicular speed begins to decrease and with Level of Service “E” and “F” speed greatly decreases. Mr. Cashman stated that for I-64 motorists (anticipating a speed of 60 MPH) Service Levels would need to be in the “E”-“F” range for diversions to Military Highway (anticipating a speed of 45 MPH) to occur.

Mr. Henderson asked if a Level of Service is determined at peak hours or is it an average.

Mr. Cashman stated it is representative of peak hours. Mr. Cashman stated it is typically created by daily volumes.

Mr. Cashman provided an illustration of the Actual Model Output representative of I-64 at Route 30 including the actual volume on each road.

Mr. Cashman showed an illustration of the volume numbers been computed versus what had been counted, showing calibration adjustments.

Ms. Leverenz asked for clarification regarding the calibration of numbers.

Mr. Cashman stated the major point he wants to make is that the model is a tool and is great for certain purposes. Mr. Cashman stated it was developed for forecasting system volumes and looking at land-use development patterns at a metropolitan level. Mr. Cashman stated beyond the metropolitan level the model becomes less effective.

Mr. Porter stated he is surprised that people have such similar habits with vehicular traffic generations.

Mr. Cashman stated the numbers generated by the model represent vehicular traffic generated from major facilities.

Mr. Porter stated that it was interesting that it would incorporate behavioral changes seen as a result of road congestion.

Mr. Henderson asked if the model would incorporate distinct traffic patterns seen from time-shares. He remarked that the County has a great deal of time-shares.

Mr. Cashman stated that they are only included in so far as they are in the TAZ data set.

Mr. Fraley stated that a unique set of traffic patterns would also be exhibited at retirement communities.

Mr. Porter stated the number of employees would rise though the number of trips of generated by those individuals living there would drop.

Mr. Porter asked if Colonial Heritage area should be identified with its own TAZ.

Mr. Cashman stated that it should not be identified with its own TAZ. Mr. Cashman stated that further analysis of the existing TAZ could be considered when calibrating James City County's model.

Mr. Henderson asked if each trip is one out and one in.

Mr. Cashman stated that it is, each trip reflects one way, not roundtrip.

Ms. Mary Jones stated that timeshares will have to be considered as they contribute unique traffic patterns to the area, as well as the College of William and Mary.

Mr. Henderson noted that the County has 2,500 timeshares.

Mr. Cashman stated that he suggests the County conduct a detailed corridor study for some of the concerns that are being raised. Mr. Cashman stated that you cannot rely on the model for turning movements and interchange analysis. The model will not offer any information regarding the traffic patterns developed within the TAZ.

Mr. Henderson stated that traffic studies have been conducted for various areas. Mr. Henderson stated that the Monticello corridor within New Town is the most problematic with the County.

Mr. Fraley stated the Stonehouse area will also need to be addressed in years to come.

Mr. Porter stated that the Eastern State Property is also an area of concern.

Mr. Cashman stated that to further study a particular area of concern a consultant would need to go in and provide a turning movement count at a given intersection. Mr. Cashman stated this model could be useful in analyzing these concern areas by providing a forecast if accurate count numbers are applied.

Mr. Henderson stated that we have some of this information as well as a plan for improvements.

Mr. Cashman stated he plans to address the limitations of the model by splitting the TAZ's into smaller areas for the more detailed James City County model. Mr. Cashman stated that by splitting the TAZ's into sections you run different sets of data forecasts. Mr. Cashman stated by adding more links and more detailed calibration to roadway networks they will help address the limitations of the model.

Ms. Jones stated that different land uses will impact traffic differently.

Mr. Fraley stated that there is data turned in for different plans that should be used for this purpose.

Mr. Henderson asked if there is a target number of TAZ's.

Mr. Cashman stated that there is not.

Mr. Henderson asked how many TAZ's there are in James City County.

Mr. Cashman stated around forty.

Mr. Cashman stated the model would mark those areas where future development could not occur, creating the most accurate model possible.

Mr. Porter asked if information provided by applicants (from traffic studies) could be applied to the model.

Mr. Cashman stated the model could not be used for that purpose. Mr. Cashman stated that this should be seen as a policy analysis tool.

Mr. Porter asked if the model can be used to see the impact of different land-use considerations.

Mr. Cashman stated the model cannot be used that way at this time. Mr. Cashman stated the model will be used to produce build-out and model land use changes later.

Mr. Fraley stated he saw this as a powerful tool in understanding the pressure placed on the infrastructure.

Mr. Vaughn Poller asked if the model can be used for community analysis beyond traffic.

Mr. Cashman stated that this is exclusively a transportation model.

Mr. Porter asked for further clarification on the previously stated one percent Mode Split that goes to transit. Mr. Porter asked if this is across the board or allocated to certain areas.

Mr. Cashman stated it is generally across the board.

Mr. Henderson asked if the output of build-out analysis is built upon certain assumptions of land-use.

Mr. Cashman stated that there are two models: one is build-out as seen in the current Zoning map and the other as seen with the current Comprehensive Plan Land Use Map designations. Mr. Cashman stated the model can allocate variable growth to TAZ's based on Comprehensive Plan policies and locally developed forecasts.

Mr. Cashman stated modeling will address growth potentials. Mr. Cashman stated the Logit Model will help predict what that growth rate would look like. The Logit Model uses existing and historic data and build-out potential to generate forecasts. The Logit Model assumes growth rates will slow as build-out is approached.

Mr. Cashman created a graph illustrating how the Logit curve is used to forecast growth rate.

Mr. Poller asked if the Logit Model can be used as an effective barometer to evaluate policy.

Mr. Cashman stated that it can. Mr. Cashman stated that within a given TAZ you can apply seven or eight different Logit curves to obtain different forecasts for a given policy.

Mr. Fraley asked if the build-out will include a population estimate.

Mr. Cashman stated it will.

Mr. Fraley then inferred that the population estimates could be used for data needed to evaluate other community needs i.e. schools, water, police, and fire.

Mr. Poller asked if data is available regarding the socioeconomic characteristics of the projected population.

Mr. Cashman stated the forecasted information will not include the cost of the units (thus offer no socioeconomic data).

Mr. Cashman stated the information will include density and number of units.

Mr. Poller asked how density is determined.

Mr. Cashman stated in this case the County will let URS know how many units any given area can handle.

Mr. Fraley stated this raw data can then be used for the Housing section of the Comprehensive Plan.

Mr. Poller stated he wanted a better feel of how we can anticipate the impact of the projected development.

Mr. Porter clarified that there are two models being created for this analysis.

Ms. Rosario stated that this data will be taken and built upon at later times for other analyses.

Mr. Cashman stated that once you get beyond revising the network, different iterative models can be created. Mr. Cashman stated that an Iterative Alternative Model will provide data according to forecasted outcomes of policy.

Ms. Rosario stated there can only be a finite number of iterations built in due to cost.

Mr. Cashman stated that URS will be providing with this data: daily volumes at build-out, anticipated increases over current daily volume, current Levels of Service.

Mr. Fraley asked if it is possible to establish a standard for an acceptable Level of Service through either the Zoning Ordinance or Board policy. Mr. Fraley stated that the citizens of the County may want a Level of Service above the suggested aim of "C".

Mr. Fraley acknowledged and thanked Mr. Icenhour of the Board of Supervisors for attending the meeting.

Mr. Porter stated that state law enables localities to establish their own standards regarding traffic/road conditions and the necessary improvements to achieve those standards. Mr. Porter stated that maybe this could be addressed with the *Six Year Plan*, but there is very little money available at this time. Mr. Porter stated that it is his understanding that the State Department of Transportation (VDOT) is responsible for the local roads. Mr. Porter stated that this would have to be a joint effort between VDOT and the given locality.

Mr. Fraley stated that the citizens of the County are concerned about traffic. Mr. Fraley stated he felt that it was imperative to not accept development beyond a certain Level of Service. Mr. Fraley stated that in the past he has seen results deemed concerning, generated from impact studies, that did nothing beyond stated that there is an apparent problem. Mr. Fraley stated there needs to be more action taken when concerning results from studies are seen. Mr. Fraley stated that there are powerful tools that can be used to control growth that may need to be used.

Ms. Rosario stated that for some years there has been consideration given (in the Comprehensive Plan) to adequate public facilities, schools, water, roads. Ms. Rosario stated that you can then apply certain Levels of Service or other standards to the given subject. Ms. Rosario stated that in the past groups have had to weigh the options of: maintaining the flexibility in a policy or having it limited to the extent so that there is an automatic answer depending upon the results of the test. Ms. Rosario stated that past groups have wrestled with this aspect while updating the Comprehensive Plan and then implementing the Comprehensive Plan through Zoning Ordinance revisions.

Mr. Fraley stated there has always been language in Comprehensive Plan that empowers the Board of Supervisors to implement change, but it has not been used.

Ms. Rosario pointed out the scenario with the schools.

Mr. Fraley stated the problem with the school test was that it was not cumulative.

Ms. Jones stated that schools are over capacity and the numbers don't even reflect the cumulative effects. Ms. Jones stated that this particular policy is not an ineffective one.

Mr. Porter stated that the group needs to define what they want. Mr. Porter stated they need to demand a cumulative impact study that defines what they need to evaluate and who is responsible for the study.

Ms. Rosario stated that we also need to have mechanisms and resources in place to collect this data.

Mr. Fraley stated it would just require establishing a database.

Mr. Poller stated that the database would also require maintenance.

Mr. Porter stated that the database first needs to be established then defined how the data will fit the model to better apply updates.

Mr. George Billups asked if contractors can be expected to put aside money for public facilities. Mr. Billups stated that we would then need to have someone monitor the money until it is spent. Mr. Billups stated the County would then be liable to monitor the track of the money as it is spent and how it is spent.

Mr. Henderson stated that the County does have a Proffer Administrator.

Mr. Porter stated that the County is required to send in a report on Proffers.

Mr. Billups asked if developers would receive monies back if its designated use no longer needs further funding.

Mr. Porter stated that it depends on how the proffer reads. He stated that some proffers are very specific in their use and some are more general.

Mr. Fraley stated that last year the language guiding proffers changed. Mr. Fraley stated that there are jurisdictions that require public facilities tests to better forecast the impact of the proposed development upon the community.

Ms. Rosario stated that typically those tests are applied to properties that are coming in for consideration through the rezoning process.

Mr. Porter asked if as a committee they could make a recommendation on this.

Mr. Fraley stated he thought they could.

Ms. Rosario stated that typically that would be fully addressed post-Comprehensive Plan update due to the level of detail that would need to be considered.

Ms. Rosario stated she wanted to allow Mr. Cashman to finish his presentation before the meeting would come to a close.

Mr. Cashman stated that he would be providing the Committee with recommended improvements, and the cost of the recommended improvements. He stated they would also priority rank the improvements and provide the methodology used.

Mr. Porter asked how VDOT would use the data provided.

Mr. Weidenhammer stated that one way they could use the model is by applying the projected growth to their own data analysis. Mr. Weidenhammer stated that the conclusions and recommendations that come out of the model will also be used.

Mr. Porter asked if VDOT has an established standard they attempt to achieve in regards to the Level of Service. Mr. Porter asked if an applicant were to present a case that would detrimentally affect the Level of Service to a given road would VDOT recommend that the legislative body reviewing the case deny the proposal.

Mr. Weidenhammer stated that VDOT will review the technical data provided by the applicant to confirm the provided projections, and improvements needed but they will not recommend approval or denial based upon a Level of Service.

Mr. Porter stated that the General Assembly has the view that jurisdictions need to have greater fiscal responsibility for their roads. Mr. Porter stated that he felt it is the Board's responsibility to create policy that reflects the will of the General Assembly.

Ms. Rosario stated that if the citizens of the County are uncomfortable with the "C" Level of Service the board could be sensitive to that. Ms. Rosario stated on the other hand if there are special circumstances where it would be desired to go beyond "C" that could be considered as well.

Mr. Weidenhammer stated that the state has put in place new policy giving jurisdictions the authority to set up impact fee service area for required road improvements. Virginia Tech is putting out some guidelines as to how jurisdictions can apply this new policy.

Mr. Porter stated that he felt jurisdictions would wind up being responsible for road maintenance. Mr. Porter stated that we need to be aware of how this will affect the County's fiscal resources.

Ms. Rosario stated that the Committee will have to determine what the focus of our improvements will be. Ms. Rosario stated that the three points of interest are: widening the existing road network, access management, and interconnections between properties.

Mr. Henderson stated that he is aware of cul-de-sac issues.

Mr. Porter stated that he is aware of the level of difficulty associated with these decisions as they may be unpopular with the public, especially interconnections.

Mr. Poller stated that the public needs to be aware of the choice. Mr. Poller stated a possible choice as: if you don't have interconnections you will pay a higher cost.

Mr. Fraley asked if the LandMark engineer in the audience, Deborah Lenceski, wanted to speak, and describe how engineers such as herself would use this information.

Ms. Lenceski stated she took an interest in watching the process.

Mr. Henderson stated that James City County is unique in how the development in master planned communities is staggered over the course of many years. Mr. Henderson stated that while most communities see spikes in new home development, James City County has maintained a consistent pattern of approximately 1,000 new homes a year for many years. Mr. Henderson stated that this pattern, unique to James City County, makes it a challenge for the governing bodies to make decisions on future development. Mr. Henderson stated having approved development that may not be complete for many years makes it more difficult to fully understand the impacts it will create.

Ms. Rosario stated that this is one reason staff thought it would be valuable to do two build-out scenarios one reflecting the current Comprehensive Plan designation and the other the current Zoning designation.

Ms. Rosario stated that Mr. Cashman will be returning to speak to the group many times over the course of the next several months. Ms. Rosario stated that the group should move on to complete all the other items needing attention on the agenda.

Mr. Fraley asked Mr. Cashman when they should anticipate seeing the first set of data.

Mr. Cashman stated he will have the data completed by late November.

Mr. Vinciguerra stated that on December 15th the information will be presented to the Committee.

V. OTHER ITEMS

Mr. Jose Ribeiro stated that at this time there are schedule conflicts for the second and third meeting of the month, each month. Mr. Ribeiro got a consensus from the Committee to have all Tuesday meetings as well as every third Monday of the month 3:00-5:00 p.m., rather than 4:00-6:00 p.m. as well as every third Monday of the month. The consensus of the group was to maintain the 4:00-6:00 p.m. schedule for the second Monday of the month.

Ms. Jones stated that if a member of the Committee is unable to attend the meeting they could always watch the meeting and participate by posting on the blog.

Ms. Rosario stated that there will be a new schedule available next week.

Ms. Rosario suggested the group move on to nominate a chair and vice chair for the Committee.

Ms. Jones nominated Mr. Fraley as the chair.

Mr. Henderson seconded the nomination of Mr. Fraley for chair.

The nomination was approved unanimously by voice vote.

Mr. Porter nominated Ms. Leverenz as vice-chair.

Mr. Poller seconded the nomination of Ms. Leverenz for vice-chair.

The nomination was approved unanimously by voice vote.

Ms. Rosario reminded the Committee that the bios are needed for posting to the website. Ms. Rosario wanted to also have the group forward contact information to be posted to the website.

Ms. Rosario stated that the Board of Supervisors was expected to address the appointment needed to the Steering Committee to replace Mr. Joe Poole at the next meeting.

VI. PUBLIC COMMENT

Ms. Rosario moved to open the public comment period.

There were no members of the public present for public comment.

Ms. Rosario moved to close the public comment period.

VII. ADJOURNMENT

Mr. Fraley motioned to adjourn, with a second from Mr. Billups.

The meeting was adjourned at 6:00 p.m.

Jack Fraley, Chair