

DIXIE TRANSPORTATION ADVISORY COMMITTEE

Meeting Minutes April 1, 2009 Five County AOG

PRESENT

Dave Demas, St. George City, City Engineer, Chair
Dave Glenn, Ivins City, Public Works Director, Vice-Chair
Mike Shaw, Washington City, Public Works Director
Larry Bulloch, St. George City, Public Works Director
Cameron Cutler, St. George City, Traffic Engineer
Jack Taylor, Santa Clara City, Public Works Director
Rick Torgerson, UDOT Region Four, Program Manager
Kelly Lund, FHWA, Planning Engineer
Elden Bingham, UDOT Planning
Tamerha Maxwell, UDOT
Ross Romero, Washington City
Chuck Gillette, Ivins City Engineer
Arthur LeBaron, Hurricane City Engineer
Lowell Elmer, Director, Dixie MPO
Curt Hutchings, MPO, Transportation Manager, FCAOG
Diane Lamoreaux, Program Specialist, FCAOG
Lee Cabell, Horrocks Engineering
Russell Youd, Horrocks Engineering
Justin Beddoes, Horrocks Engineering
Michael Heaps, Horrocks Engineering
Lori Isenberg, Northwest Dynamics
Bob Nicholson, St. George City
Scott Peterson, Land Owner
Randy Black Jr., Land Baron Investments
Tyler Hoskins, Airport Parkway Development
Curt Gordon, Desert Canyons Development
Brent Bluth, SITLA
Gary Wood, EDAW (Conference Call Participation)

ABSENT

Ron Whitehead, Washington County, Public Works Director
Steve Call, FHWA, Planning Engineer
Ryan Marshall, General Manager, SunTran
Lynne Scott, BLM/Dixie Regional Bike and Pedestrian Committee

CALL TO ORDER

Dave Demas, Chair, called the meeting to order and welcomed everyone in attendance.

MINUTES

Chairman Demas noted that a quorum was present and presented minutes of the March 4, 2009 meeting for discussion and consideration. Dave Glenn pointed out corrections on page 1 listing him as Chair and it should be Vice-Chair and on page 6 where the Ivins City project amount should be \$150,000 for the Snow Canyon Drive/Snow Canyon Parkway roundabout.

MOTION WAS MADE BY MIKE SHAW, SECONDED BY DAVE GLENN, TO APPROVE MINUTES OF THE MARCH 4, 2009 MEETING, INCLUDING ABOVEMENTIONED CORRECTIONS. MOTION CARRIED.

SHORT RANGE PLANNING UPDATE

Corridor Preservation Agreement Page Corrections: Lowell Elmer reported that the Corridor Preservation Agreement, which was signed and dated January 12, 2009, contained an error listing the year as 2008. This has been corrected to read 2009 and all parties have been provided updated document originals.

Corridor/Mapping Issues: Lowell indicated that no issues for corridors of significance have been provided for discussion since the last meeting.

2009 Unified Planning Work Plan (UPWP) Modifications and Draft 2010 UPWP: A copy of the draft 2010 UPWP, including a single sheet summary, was provided for review and input. This document contains some of the same boiler plate language as past work programs. The single sheet summarizes all of the funding sources and vote share for a total budget of \$381,711. The vote share of approximately \$9,000 takes into account the downturn of the economy, shortages in federal highway and federal transit as well as anticipating potential recisions. Staff is in the process of developing the Dixie MPO 2011-40 Long Range Plan, and will continue to follow UDOT's lead on this process. The work plan outlines coordination with the Washington County Council of Governments (COG) as they develop local funding and project prioritization processes and will include interface between the MPO and RPO. A line item for the statewide traffic demand model to modify Traffic Analysis Zones (TAZ's) is also included in the UPWP. Previous conversations with UDOT indicate that a contract has not been executed for this project. This activity is projected to begin in this work program and continue into the 2010 UPWP as well. Eldon Bingham reported that UDOT is close to getting a TAZ contract in place. The last item in the work plan will be work on projections which will immediately follow the TAZ update. Short range planning will also include continuance of work on the Southern Parkway Phase III Steering Committee into next fiscal year.

Another item included in the work plan is to manage commuter transit, bicycle, and pedestrian planning, including Bus Rapid Transit (BRT) corridor preservation. A scope of work for this activity was provided previously to this group for input. No comments have been received to date. Providing that the group is comfortable with the scope of work, staff would like to move forward to bring a consultant on board for this project. Staff has reviewed the UDOT consulting pool to determine which firms have experience working with BRT types of topics as well as corridor protection issues. AECOM comes up as a qualified firm who has an office located in Salt Lake City. This firm assisted in development of the scope of work for this project, and is currently involved in development of the Salt Lake County transit study for UTA which considers BRT and other types of services. The company is also completing the Provo/Orem BRT study between Utah Valley University (UVU) and the Provo town center. They are also completing an EIS for the Draper light rail extension of TRAX, as well as a Foothill Drive to the University of Utah BRT study. A national expert works for this firm to provide professional technical support. Staff would like to extend an opportunity to AECOM for development of this study. Lowell explained that the UDOT contractor pool can be utilized for contracts less than \$100,000 without going out for an RFP because UDOT pre screens contractors for certain items. Two out-of-state firms were also listed in the contractor pool for this type of work. However, AECOM is very heavy into BRT activities and some of their staff are familiar with the St. George area. Committee members asked that Lowell approach AECOM to determine if they are interested in providing services for this project. A final scope of

work, including cost of the study, should to be presented at a future DTAC meeting for consideration.

LONG RANGE PLANNING

ITS Communications Plan Update: Curt Hutchings reviewed a handout outlining Steering Committee members for the Dixie Regional ITS Communications Plan. The project manager is Dian Williams with UDOT, and the consultant selected is TransCore. The handout outlines the scope of work, staffing plan, deliverables, and schedule. The cost estimate for this plan is \$30,000. Final document completion is anticipated by May 29, 2009. Participation and coordination for this project will mainly be accomplished via e-mail and teleconference calls.

Model TAZ/Socio-Economic/Land Use Adjustments: This item was covered under UPWP discussion.

Regional Transit Corridor Preservation Study - Draft Scope: Information was provided under Short Range Planning discussion.

DIXIE TIP

2009-13 TIP Modifications - Stimulus Package Action: Ms. Diane Lamoreaux provided copies of the 2009-13 Dixie TIP and outlined modifications to bring in \$50M in state of Utah funds to the Southern Parkway. This funding was approved by the Legislature through bonding. State UDOT staff will be setting up a number of pins and splitting out these funds for specific areas along the corridor. In addition, adjustments approved at the last DTAC and DTEC meetings were also outlined. Larry Bulloch pointed out that the \$3.8M in state funds is federal stimulus and should be depicted appropriately. Staff explained that a portion of the MPO funding (\$201,651) for the Black Ridge Drive/Hilton Drive project was already obligated and could not be moved to the Virgin River Bridge project. Federal stimulus funds in the amount of \$2.4M is programmed to the Black Ridge Drive/Hilton Drive project. Additional funding programmed to the Virgin River Bridge project includes \$760,000 in federal stimulus funds. The other portion of federal stimulus funding listed is in anticipation of unused federal funds from other states. There is also \$121,000 in MPO funding that was shifted to this project. The Mall Drive Bridge project funding (\$20M) is programmed in anticipation of discretionary grants for projects between \$20M to \$500M.

DTAC members held a work meeting March 23, 2009 to discuss programming of funds and outcomes from modeling that UDOT provided as part of the I-15 study. At that time, the group addressed possible shifting of funds from various projects to a new project titled "Bluff Street, Boulevard to Redhills Parkway, including Sunset Flyover. It was determined that funds could possibly be shifted from projects as follows: **1) Western Corridor--** \$279,000, plus \$20,260 match; **2) Bluff Street Corridor--** \$184,000, plus \$13,361 match; and **3) Redhills Parkway, Grade Separated Interchange (new 2010 project)--** \$411,000, plus \$29,845 match. Funds programmed in the Western Corridor and Bluff Street Corridor are previous year funds, whereas the \$411,000 in the Red Hills Parkway Grade Separated Interchange is Small Urban funds programmed in 2010. This would show a partnership with UDOT to program funds into this project. A handout outlining discussion from the work meeting was provided. Rick Torgerson, UDOT, pointed out that the 2009-13 TIP modification programming \$874,000 into a new pin for this corridor would actually allow UDOT staff to take this action to the State Transportation Commission during their April workshop to request FY 2012 or 2013 funds for construction and/or right-of-way acquisition, etc. One difficulty in obtaining funds for this corridor is the fact that it only qualifies for STP funds, which are very limited. It was noted that right-of-way acquisition costs will be huge.

Kelly Lund, FHWA, reported that his office has been tasked to provide federal oversight for all projects funded under the Recovery and Reinvestment Act. This will be a daunting task given the number of projects that will be undertaken in Utah and will require assistance from each region to provide direction to projects which are listed as various locations. Rick Torgerson explained that there are 27 enhancement projects which include ADA ramps or safe sidewalk projects that are located all over the state. The first goal is to construct sidewalks where there are no sidewalks and ramps. He indicated that UDOT is getting ready to advertise these projects beginning April 18th or 25th. Bid openings will be staggered and construction is anticipated to be two months out. Another enhancement project is a bike path on SR-12. Eldon Bingham, UDOT, commented that some of the requirements are pretty rigorous in terms of tracking. Lowell mentioned that in discussion with UDOT staff it appears that smaller MPO's will not be required to be involved in tracking projects. However, the state of Utah may still be required to track these projects. Rick Torgerson indicated that additional requirements are being built into contracts which will be a lot of extra work for contractors. Some of these items include: 1) Certified electronic payrolls; 2) Reporting job creation; 3) Average hourly rates, etc. UDOT is trying to automate these requirements as much as possible.

Rick Torgerson suggested that perhaps there is a better way to format and produce the MPO TIP using the ePM system which is utilized by the state of Utah. Providing that the appropriate reporting portion of this system can be available to the MPO for access, this would be an easier method to utilize. Staff will work with UDOT to explore this as an option for TIP management.

MOTION WAS MADE BY JACK TAYLOR, SECONDED BY CAMERON CUTLER, TO APPROVE THE 2009-13 TIP MODIFICATIONS, INCLUDING ADDITION OF THE \$50M STATE FUNDS TO THE SOUTHERN PARKWAY AND TRANSFER OF FUNDS FROM THE WESTERN CORRIDOR (\$279,000 PLUS \$20,260 MATCH), BLUFF STREET CORRIDOR (\$184,000, PLUS \$13,361 MATCH) AND REDHILLS PARKWAY INTERCHANGE (\$411,000, PLUS \$29,845 MATCH) TO A NEW PIN TITLED BLUFF STREET, ST. GEORGE BOULEVARD TO REDHILLS PARKWAY INCLUDING THE SOUTHBOUND FLYOVER AT SUNSET BOULEVARD (\$874,000, PLUS \$63,466 MATCH) AS OUTLINED. MOTION CARRIED.

2010-14 TIP: Lowell has worked with UDOT staff to obtain Small Urban fund amounts for 2011 to 2014 with the thought that funds could possibly be programmed back into some of the projects where funding is proposed to be removed. Small Urban funds for out years, taking into consideration the 80% that the MPO is allowed to obligate, are as follows: **1) FY 2011-- \$432,000; 2) FY 2012-- \$247,000; 3) FY 2013-- \$1,000,050; 3) FY 2014-- \$1,000,050.** It was explained that these figures are obtained from the state's current balance sheet of funding which is available for the Dixie MPO. Each year the MPO receives approximately \$720,000 in Small Urban funds and \$770,000+/- in DMPO Flex funds. However, the MPO is only authorized to obligate 80% of these funds and it is prudent to conservatively obligate funds. Larry Bulloch mentioned that it is important to determine which project will be likely to move ahead first when considering how to program these funds. Once the environmental is completed for the Bluff Street Corridor, it will take a number of years to acquire right-of-way prior to actual construction. Redhills Parkway will be ready for construction in the near future because the environmental has been completed. This would make the Redhills Parkway Interchange a high priority project and it is also a safety issue. Rick Torgerson pointed out that none of the funding amounts discussed today will solve either of the abovementioned projects. However, programming funds into these two projects will assist in positioning the projects with the State Transportation Commission to hopefully obtain additional funds. Both Bluff Street (including the south bound flyover at Sunset) and the Redhills Parkway Interchange are included in the top 10 list of new structures which was presented by UDOT at the work meeting last week. Estimated costs for the Sunset Flyover is \$16M, which includes the cost

of expanded lanes to Redhills Parkway. It is unknown how much right-of-way costs will be at this point. Rick Torgerson indicated that the group could program the \$432,000 and \$247,000 to begin purchasing right-of-way for the Redhills Parkway Interchange and use the \$497,000 appropriations amount for the design. At that point, it would need to be determined what the next step would be to fund construction of this project.

Mike Shaw suggested that the committee consider funding some projects with FY 2013 and 2014 Small Urban funds that were not funded in the past. A number of things have changed since projects were submitted for funding consideration, especially in terms of the Southern Parkway. Washington City would like consideration of two projects, i.e., extension of Washington Fields Road to Warner Valley (widen and straighten) and Washington Dam Road section from 4300 West to tie these roadways into the Southern Parkway. These two links to the Parkway will be important as an interim connection. There needs to be a better way to consider projects which were submitted in the past. A list of previously submitted concept reports would be helpful for use when additional funds become available. It was suggested that other funding of projects be considered during the May 2009 meeting. Lowell indicated that the MPO will go out to public comment for the FY 2010-14 TIP in July. Larry Bulloch commented that it is important for everyone to get up to speed on which projects have the greatest need prior to committing Small Urban funds in out years. Members agreed that a thought process is needed to adequately consider projects. Mike Shaw mentioned that funding for 2012 and 2013 could be considered through advance construction by jurisdictions as well. Chairman Demas asked that MPO staff develop a list for discussion and/or programming of funds in out years for the May 2009 DTAC meeting. Larry Bulloch suggested that all member cities provide copies of past requests or a list of projects to be considered to MPO staff. This should also include new projects of regional significance. Rick Torgerson indicated that projects can be input into the ePM system as well and held for consideration. Development of some type of non-funded list will assist in the assessment of projects when funds become available for programming.

MOTION WAS MADE BY MIKE SHAW, SECONDED BY JACK TAYLOR, TO PROGRAM SMALL URBAN FUNDS FOR 2011 (\$432,000) AND 2012 (\$247,000) TO THE REDHILLS PARKWAY INTERCHANGE PROJECT. MOTION CARRIED.

STATE AND FEDERAL ACTIONS

Program Development - UDOT: Rick Torgerson reported that an open house was held last night for the Dixie Drive Interchange and things seemed to go very well. It is anticipated that the EA will be signed by mid-May and will move into design and construction hopefully by the end of the year. This is an \$80M dollar interchange that will be an asset to the area. The Southern Parkway is on a quick schedule and staff is working out details on the \$50M general fund money. Discussion is taking place with cities to determine the best use of these funds which are now available. One thought is to utilize this construction money with other funds to create some connections to the airport from Washington City and Hurricane. It is anticipated that a formal recommendation for the \$50M will be presented to the Transportation Commission in June. Final paving on the Bluff Street Interchange project is approximately three weeks out depending on temperatures and the ability in finding oil to complete this portion. UDOT anticipates a June/July opening of the Southern Parkway to River Road. SITLA has completed the agreement with the state of Arizona to create the new tie-in to River Road. Brent Bluth, SITLA, reported that they will be ahead of UDOT with completion of this section. Rick Torgerson indicated that beams will be set at River Road in the next couple of weeks, and grading out to the airport is continuing. In addition, work has started on the Fort Pierce Wash bridge and a couple of contracts will be released for Exit 6 and Exit 7 in June. UDOT is hopeful that at this time next year the road out to the airport will be open. Approximately

\$175M out of a proposed \$475M has been received for construction of the Southern Parkway with grade separated interchanges. However, he pointed out that there is still a \$300M gap in funding for the project.

Federal Oversight Update - FHWA: Provided earlier in meeting.

PHASE III STUDY - SOUTHERN PARKWAY STEERING COMMITTEE

Welcome: Lori Isenberg welcomed those in attendance, asked that everyone sign the attendance sheet. She reviewed four agenda items for discussion and consideration.

Traffic Volumes: Lee Cabell indicated that the group has developed base land use and traffic volumes and will now be moving into a more detailed traffic analysis on the interchanges in terms of roadway spacing and other issues of concern. One item of discussion has been the proximity of adjacent intersections to interchanges on the Southern Parkway. Traffic volumes discussed in previous meetings have been broken down into peak hour traffic volumes. A detailed model of two different scenarios has been developed at interchange #7 which is the airport access (Airport Parkway Interchange). These were modeled with 500' and 1900' separations to demonstrate the differences in the tie-in of the Washington Fields Road. A detailed traffic simulation model of Airport Parkway Interchange and the next adjacent intersection to the west includes the following: 1) Level of Service; 2) Delay; 3) Difference in queues; and 4) Flexibility. Flexibility may be the most important item for cities, land owners, partners, etc. in terms of accommodating what might happen in the future. The level of detail in regard of specific land uses in areas adjacent to interchanges will be worked out over the next several years as development occurs.

A simulation model for peak hours was reviewed for Interchange #7 depicting two lanes on Airport Parkway coming east toward the interchange. The outside lane is queuing up extremely long whereas the inside lane queuing is much shorter. This is because of the close proximity to the interchange and the heavy right turn volume going onto the Southern Parkway. In addition, the lane from Washington Fields Road into the interchange provides dual left turn lanes but is queuing extremely long. This is occurring because people do not feel that they have enough time to change lanes. From a volume standpoint these lanes would possibly work. From a lane utilization standpoint the intersections are not operating efficiently because of the close spacing between the interchange and intersections. A second simulation was reviewed depicting the Washington Fields Road tie-in from an intersection with a 1900 foot separation. This provides a better balance of the two lanes turning left onto Washington Fields Road with people using both lanes. It also provides a greater distance for making the lane change to access I-15. Volumes depict approximately 1,000 vehicles per hour turning right from Airport Parkway onto the Southern Parkway. There is also a lot more balance on lanes coming into the intersection because of increased time provided through greater separation. The same traffic volumes were used under both scenarios to show the influence of spacing between these intersections. Even though design standards would allow an intersection 500 feet from the Southern Parkway, preliminary analysis shows that if the first intersection is a major signaled intersection as opposed to a local non-signalized intersection the utilization of lanes and traffic operations are not as good as they would be with the intersection located a further distance back. The sensitivity of operations and traffic through the intersection is a lot higher with more separation. It also allows more flexibility in establishing land uses in the area. Tying Washington Fields Road into one of the intersections further away seems to provide the most flexibility and best traffic operations on the Airport Parkway and the influence it has on the Southern Parkway. Gary Wood commented that reference is made to the airport entrance at interchange #7 and the concept would be applicable elsewhere. Even though a signalized intersection is located 1900 feet from the interchange, an intersection providing access to local

streets could still be located 500 feet from the Southern Parkway. This same approach is applicable for interchange #9 planning efforts. Dave Demas commented that it may be necessary to limit movements in the future at those intersections closer to the Parkway as development occurs in the area. Those issues will be studied on a more detailed basis as plans move forward and development occurs in the area. More detailed traffic analysis would be required at that time. Gary Wood pointed out that the study appears to be looking at the worst case scenario in terms of Desert Canyon because of more development between the interchange and the airport as opposed to interchange #9. The traffic analysis is based on all of the interchanges being built by 2035. ADT volumes for all links presented last month were utilized and broken down into a peak hour. Other interchanges can be modeled as the study moves forward. It was pointed out that the minimum distance for a side street to connect was not examined at this point.

Roadway Network: Lee Cabell outlined options to be presented as follows: **1) Option 1A--** Washington Fields Road closer to Southern Parkway; **2) Option 2A--** Washington Fields Road closer to Airport; and **3) Option 4A--** No interchanges on Southern Parkway between the airport and Warner Valley and grade separated crossings at two other locations. As previously indicated, option 4A relates more to funding and timing of the interchanges. From the roadway network standpoint Option 1A depicts the Washington Fields Road tie-in at the 1900' distance.

It was determined at the last meeting that Curt Gordon would host a meeting between property owners to discuss roadway alignment issues i.e., intersection tie-in, curves and appropriate location of roadway. Curt Gordon indicated that property owners met earlier today and developed a proposed solution which he asked Tyler Hoskins to present. Tyler Hoskins provided copies of a map and reviewed the proposed alignment agreed upon by property owners. He explained that one thing which was brought up was the series of curves which was previously presented. None of the property owners are desirous of curves being on their property because of access and sight distance issues which it creates on the inside of the curves. Owners discussed how to eliminate those curves and straighten out the road alignment. There is a lot of history as to how the property lines have occurred in this area. However, property owners recognized that at some point the roadway would go through some of the property lines and worked to find the best option for the road alignment. Those discussions provided the ability to straighten out one of the curves and bring the road along the edge of that property. Other issues considered in the re-alignment included access to other property owners and the need to provide adequate depth for development of properties. This was as far to the West as the line could be placed. Two property lines were split and then the road goes straight into the Desert Canyon development. This alignment eliminates all of the funny curves as well as softens the remaining curve and requires the need for some of the property owners to begin working together. Property owners as a whole have examined the potential of trading properties and this is highlighted in pink. There is a potential for a trade between the Land Barrons group and t. George City to provide a contiguous piece of property. This will require working out options of acreage for acreage trade of land, but from a roadway standpoint the entire group of property owners reached agreement on this alignment. This option flattened out curves and continued the concept of having the Washington Fields Road serve as a frontage road. This also keeps the Washington Fields Road close enough to the interchange to continue the theme of having this road within approximately 1/4 mile of the interchange. This allows people to use the interchange as more of a commuter route to and from developments in the area. From a traffic standpoint this provides a smooth transition through this area with no real hard curves. It may be somewhat tough from a property owner standpoint, but this can be worked out. Committee members agreed that this is the best option presented to date. Lee Cabell commented that this was one of the biggest challenges faced by this group in light of the fact that there is a lot of history behind those property lines. It appeared that any alternative selected would impact someone so this provides an excellent solution. Larry Bulloch indicated that both parties would have to agree

on a land exchange and this would obviously have to be presented to the St. George City Council, mayor and city manager before the city could buy in on this proposal. Mike Shaw questioned if the majority of property owners were involved in the meeting and subsequent decision. Owners responded that every property owner who was affected was party to the meeting and decision with the exception of St. George City. Russell Youd asked if Horrocks Engineering could now prepare a draft road network as per this agreement. It was determined that the sooner this proposal could be presented to Washington and St. George cities the better. Dave Demas suggested that it would be best for Horrocks Engineering, as the consultant, to provide a recommendation for consideration of the two cities. Lee Cabell indicated that staff would run another traffic model utilizing this alignment to determine if changes resulted and distribute those results back out to everyone participating in the process. Larry Bulloch asked that an alignment which works and where the acreage to be traded balances would be preferable. In order for this to work it would require an equal trade that makes geometrical sense. Lee Caell responded that this could be accomplished looking at acre for acre trades for affected parcels. Tyler Hoskins explained that the two pieces of property involved belong to the Land Barons and the other two pieces belong to St. George City. It should be easy to accomplish an acre for acre land swap because there is enough property involved that it could make good sense. Gary Wood commented that he assumes that this property is south of the SITLA property and the airport development property. Tyler responded that this is the case. This map and information will be posted on the MPO website for access. Dave Demas noted that it appears that this comes close to the main intersection at Exit 9 and this needs to be examined as well.

Southern Parkway Interchanges: Lee Cabell indicated that copies of the letter received from Gary Wood are provided to everyone in attendance. He noted that the first part of the letter in regard to interchanges on the Southern Parkway must have been a misunderstanding. These issues will be addressed through this study process and this topic will be introduced today. The second part of the letter in regard to land use discussions is being documented and a land use statement/land use sensitivity analysis is being developed. Gary Wood suggested that his comments and recommendations provided in the correspondence be deferred to next month's meeting. Lee Cabell explained that based on today's discussion they are ready to transition into how this relates to the Southern Parkway interchanges. He reported that the Utah State Legislature provided additional funding for the Southern Parkway, and this was approved by the State Transportation Commission. Momentum on this project is still going strong at the state level. One of the tasks for UDOT, the MPO, and jurisdictions is to determine where the best place is to apply that money to continue the advancement of the Southern Parkway.

Today's discussion will focus on different types of interchanges that this group may want to investigate, impacts and ramifications, issues associated with cross streets going over or under this facility, raising grade for the Southern Parkway to go over cross streets, etc. A final item will be a short discussion on funding.

Russell Youd explained that one of the key decisions that was made early in the process was that the Southern Parkway would be a functional classification of an expressway with no at grade interchanges. Another key thing to acknowledge is that it is not a freeway and interchanges are not being developed to freeway standards. This opens the box on interchange types, provides more flexibility than on a freeway, and provides room for innovation as the group discusses interchanges and configuration. The goal today is not to engage in specific discussion on interchange types which should be applied at various locations. Information presented today will provide a feel for what types of interchanges could be utilized to be followed with an in-depth discussion next month. He reviewed types of interchanges as follows: **1) Single Point Urban Interchange (SPUI)**-- Used with high volumes and not anticipated using this tool on this corridor;

2) Diverging Diamond Interchange (DDI)-- This is a takeoff from a diamond interchange, is becoming popular in urban areas and is very high capacity. An interchange of this type is under construction on I-15 in Utah County and is the first interchange of this type in the United States. There is also one under construction in Missouri. This interchange switches traffic over providing a lot more free traffic movement; **3) Traditional Diamond Interchange/Tight Diamond Interchange**-- This is an interchange type which is currently being utilized on the Southern Parkway at River Road and at the south airport access. One variation that might be utilized if the structure is not built at this time is to construct the ramps and utilize those with right-in, right-out options on both sides with no cross access. Desert Canyons has been investigating this option for access on the SITLA/Desert Canyons boundary for interchange #5; **4) Folded Diamond**-- Sometimes referred to as a jug handle interchange. The interchange at Coral Canyon and SR-9 is a take off of this interchange type. The layout for the first interchange configuration off of the Southern Parkway by MP-2 was reviewed. This type of interchange provides some flexibility. Tamerha Maxwell commented that this interchange design was utilized to provide as much distance as possible from the I-15 ramps and access points. However, this does require a structure to provide movement under the Parkway; **6) Loop Ramps**-- Clover Leaf and Partial Clover Leaf. These interchange designs have not been implemented as part of the Southern Parkway and would not likely be applicable because of the amount of land that is required.

It was noted that interchanges #2 and #3 are proposed to be the folded diamond design. This allows movement of access points to provide proper spacing as well as some flexibility. Different options will be considered for interchanges #7, #8, #9 and Warner Valley. The goal is not to select interchange types today but to open everyone's mind in terms of what options may be available to create some innovation through selection of the proper tool. Russell also reviewed configurations of tight and folded diamond interchanges in terms of how it might impact spacing of interchanges. It is important to get into this discussion from both a development perspective and also for analysis purposes. The operational analysis of the Southern Parkway will be undertaken to make sure that interchanges will work. This ends the high level interchange discussion today.

Other topics which impact these interchanges include: 1) Cross street over vs. under; and 2) Topography. If the cross street is taken over the Southern Parkway, to run the grade out at the cross street it would require a large amount of property. Location of the first access point depends on those grades. This option tends to pull the cross streets away from the Southern Parkway in order to deal with the grades over the top. Whereas, cross streets under the Southern Parkway are at grade and do not present those types of issues. It is best for the Southern Parkway to be kept at grade for funding purposes as well. Scott Peterson asked how far it is from the center to the first access to property. Mr. Youd responded that the first access is approximately 700 feet from the center. Gary Wood indicated that as the process moves into examination of specific interchanges the topography around those interchanges will be important. Russell responded that the topography will lend itself to different types of interchanges. Interchange #9 is in the location of a 40' grade break and this will be a factor in how a specific interchange type will function. This will obviously be a factor on how this interchange will work. Russell pointed out that this level of analysis has not begun at this point. Mr. Wood mentioned that the horizontal alignment of the Southern Parkway needs to be looked at as well, especially in terms of the Stucki Detention Basin area. He pointed out that the main horizontal issues on this whole Phase 3 stretch is the configuration of the curve north of interchange #9. It was noted that next month this process would begin to examine the horizontal alignment through an in-depth discussion with this group. Larry Bulloch suggested that Horrocks Engineering get with Jacobsen Construction to obtain the latest airport layout for use in the study.

Tamerha Maxwell provided an update in regard to funding, project schedule and UDOT's interest in partnering with developers and cities. As mentioned previously, an additional \$50M has been allocated to the Southern Parkway. Funding for the entire project is estimated at \$470M and approximately \$89M has been spent thus far on Phases 1 and 2. Funding for the project has been allocated in pieces. Utilizing priorities set by UDOT, they will be able to design the Southern Parkway to SR-9 and from the Southern Parkway along SR-9 to I-15. This will include the vertical and horizontal design, structure layout sheets and development of a right-of-way plan. The \$50M funding does not lend itself to doing all of the structures, construction of a four lane facility, etc. In working with the Transportation Commission and their director, UDOT staff has been asked to prioritize for use of these funds. It is very important to recognize that UDOT will be looking at partnerships with developers and cities to spread these funds where it will provide the most benefit, similar to what has been done on Phase 2 where they have partnered with SITLA and Desert Canyon. UDOT is looking at the developers as they see a structure, bridge, interchange that they would participate in funding. Staff would like to accommodate as much construction as possible. For example, Desert Canyon did not have sufficient funds to build interchange #5 and the structure is probably not needed immediately. UDOT is allowing the developer to build the grade because they would like the Southern Parkway to go over at this location. Desert Canyon is also paying for construction of the structure and ramps at interchange #6. UDOT also had a partnership for the airport interchange. Utilizing these partnerships has been very important in securing additional funding for this facility. Another priority established by UDOT is to look at the different phases of the Southern Parkway. Through this process, phases have been revised as follows: **1) Phase III--** Airport to Washington Dam Road; **2) Phase IV--** Washington Dam Road around Sand Hollow to approximately 3000 South; **3) Phase V--** Southern Parkway to SR-9; and **4) Phase VI--** SR-9/Southern Parkway to I-15. UDOT is looking for partners to construct a two lane facility at this point and is asking developers and cities to submit proposals, pay for the cost of structures, donate property, etc. Unfortunately, there is limited time available to develop these partnerships as UDOT has been instructed that the design needs to be completed by the first of 2010. This project is now on a very fast track and proposals from developers or cities could change UDOT's priorities. Donation of property will be an important consideration. The goal is to construct a two lane facility which provides connection points. It is anticipated that final design will be completed by the beginning of the year at which time UDOT would like to do a CMGC contract. The Parkway will provide connection points at the airport, Washington Dam Road, 3000 South and SR-9. However, construction of Phase IV could be completed prior to construction of Phase III or V because the 3000 South Street to Washington Dam Road could provide a connection. Priorities for construction will be driven by participation of developers and/or cities. The Parkway requires a 300 foot corridor and in some situations additional acreage will be needed. Lee Cabell explained that the area around the Stucki Detention Basin as well as the area adjacent to SR-9 have been identified for shifting the alignment that was contained in the EIS. This study will identify these types of issues and assist in preparing the required right-of-way documents. Tamerha indicated that major interchanges included in the EIS will be included. Other interchanges will require participation of various partners.

Access Management and Design: Lee Cabell mentioned that access management and roadway design were discussed at the last meeting. At that time handouts were provided to those in attendance. He reported that Washington City is working to update their access management standards. Initial indications are that when complete these standards will be similar to those of St. George City. Based on this information, Horrocks will let this process culminate to address the issues of common access management standards. In terms of roadway standards for both cities, roadways match between the two cities. Right-of-way differences on arterial roads are in landscaping strips between cities and this is a minor issue from this studies standpoint. Horrocks

does not propose doing much more work in this regard other than documenting that standards are consistent between cities. Any remaining issues will be worked at a city staff level. Gary Wood suggested that looking at some specific roadways in this area, such as the Washington Fields Road, may require access management standards which have been more customized based on the nature of this road and how it operates.

Conclusions:

- Copies of information presented by Horrocks Engineering will be posted on the Dixie MPO website.

Action Items:

- Horrocks Engineering will prepare recommendations based on information presented today for St. George City/Land Barrons acre for acre land trade.
- Horrocks Engineering will work on the land use recommendation (Gary Wood memo).
- Developers and cities to develop proposals to submit to UDOT for partnership opportunities.

**MOTION TO ADJOURN WAS MADE BY MIKE SHAW, SECONDED BY DAVE GLENN.
MOTION CARRIED.**

NEXT MEETING

The next meeting is scheduled for Wednesday, May 6, 2009 at the Five County Association of Governments Office, Conference Room, at 1:30 p.m.

Meeting adjourned at 3:50 p.m.