



Steering/Technical Committee Meeting

Thursday, November 4, 2010 - 10:00 A.M. to 12:00 P.M.

COMPASS, Conference Room
800 S. Industry Way, Suite 100
Meridian, Idaho

**** Agenda ****

I. Consent Agenda

Page 2 **A. Approval of the June 10, 2010, Meeting Minutes**

II. Action Items

Page 6 ***A. Consider Menu of Joint Mitigation Strategies on Hypothetical Corridor – Patricia Nilsson**

Page 8 ***B. Status Report - Cumulative Impacts Analysis on a Development – Justin Lucas**

C. Establish December 9, 2010, Consortium Meeting Agenda

III. Other

IV. Adjournment

*** Attachments**

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Steering/Technical Committee Meeting

Thursday, June 10, 2010 - 1:30 P.M. to 3:30 P.M.

COMPASS, Conference Room
800 S. Industry Way, Suite 100
Meridian, Idaho

****Minutes****

I. Consent Agenda

A. Approval of the May 6, 2010, Meeting Minutes

Justin Lucas moved and Deanna Smith seconded approval of the Consent Agenda as presented. Motion passed unanimously.

II. Discussion/Information Items

A. Review Master Street Map Next Steps

Steve Price presented a review of the Master Street Map. Steve said that one of ACHD goals for the Blueprint for Good Growth process was the development of a county-wide Corridor Preservation Map, which is a shared vision where land use drives transportation planning. Providing the predictability and allocation of transportation dollars to develop the transportation network needed to support the desired land use. The implementing tool is the Master Street Map, which is a planning tool, not a regulatory tool and is subject to amendment under Idaho Code, Statute 67-6517 (a) Future Acquisitions Map.

Steve added that ACHD puts aside \$2 million a year for corridor preservation and to buy right-of-way.

Anna Canning asked if the City of Meridian would be adopting the ACHD Master Street Map, which includes roads outside of Meridian, or should the Master Street Map be folded into the city's Future Acquisition Map?

Steve replied that in his opinion, since it is a planning tool and regional in nature, the city can adopt the ACHD Master Street Map.

Patricia Nilsson said in the Blueprint Boise, the ACHD Master Street Map has been adopted by reference, and that is why Boise wanted the amendment procedure.

After further discussion, Steve said the next step that ACHD is asking for is that the cities and county adopt the Master Street Map as their Future Acquisitions Map. ACHD will work with the entities on the time frames within the statute.

Patricia asked that the process be written out so that each entity is taking the same thing to the elected officials and developers for review.

Anna said that the City of Meridian has no problem adopting the Master Street Map as part of its Future Acquisition Map. The concern is that ACHD's development services process not take longer than it does now.

Matt Stoll asked if there is a need to identify the steps that are necessary to ensure full implementation by the land use agencies, based on the timing concerns mentioned by Anna.

Steve said the planners and attorneys from each organization, either individually or as a group, need to meet and review the Master Street Map and statute and develop recognized procedures and policies to move forward with.

Charles noted the Master Street Map is reflected in *Communities in Motion* as part of the Functional Classification Map.

B. Review Variable Level of Service without Adequate Public Facilities Ordinance – Justin Lucas

Justin Lucas stated the concept of Variable Level of Service (VLOS) came out of the Blueprint process and was attached to the Adequate Public Facilities Ordinance. Now that the ordinance piece of the Adequate Public Facilities discussion has moved to the back burner, the discussion needs to continue around Variable Level of Service.

The question is, "How can we plan for the future if we do not know where we are today?" To that end, ACHD has developed a draft map, which does not include the intersection analysis, by using existing traffic counts and existing level of service. ACHD has discussed using the map as a prioritization tool for the Five-Year Work Plan, and possibly for the CIP. The map helps with the next discussion of, "If we know where we are today, are there areas where we would want to accept a different level of service than ACHD's current standard on arterials?"

ACHD staff is still testing the ability to monitor cumulative analysis, and how much staff time that will take. Some preliminary runs have been done, but there are questions about being able to maintain it in the long term at a level where ACHD is comfortable for development review. Justin stated that over the next month, testing will be done on an existing development with a TIS. The goal is to have a draft for the Steering Committee to review at its July 8 and August 5, 2010 meetings before taking it to the Consortium in September 2010.

Anna said the city councils need to know these changes in the TIS study are coming. Anna requested that ITD roads and LOS be added to the map.

Justin stated that the new TIS policies are more prescriptive in how a TIS is laid out and what information it contains. This will allow ACHD to more uniformly process a TIS, but there are still things left to the engineer's judgment because that is the only way to accomplish it, such as distribution of trips.

During the discussions about the CIP and other big planning documents, ACHD wants to use LOS to determine if there are ways to identify areas where we may be willing to accept a degraded LOS for whatever reason. It will be different than the map that was created for TLIP or for the Adequate Public Facilities Ordinance. It will be more focused.

Matt said the main concern he heard was the cities would like a cumulative impact analysis, but the question is if the elected officials are committed to that, or is it dependent upon knowing what kind of resources are going to be necessary to accomplish it.

C. Review Menu of Joint Mitigation Strategies on Hypothetical Corridor – Patricia Nilsson

Patricia Nilsson presented a summary of her work with planning staff from Eagle, Garden City, and Meridian in assembling initial options for mitigation and applying them to a hypothetical corridor. After review of the options, it was determined that a discussion on the types of mitigation should be had first.

The planning staff group considered the following question:

What mitigation measure(s) would be considered for use in your community when a proposed development would exceed adopted roadway level-of-service standards:

- a) Reduce development intensity to be within LOS standard if possible, otherwise denial of proposal.
- b) Developer proffer of off-site improvements to transit, pedestrian, and/or bike facilities along affected roadway corridor.
- c) Voluntary roadway and/or transit facility fee (this is conceptual).
- d) TDR-like program to “purchase” development rights along existing congested corridors to transfer to site.
- e) Other

The group supported Options A and/or B. Option B was supported with the qualifier that the mitigation actually had to be demonstrated. The other options were deemed too complicated. Additional options identified included, local governments’ construction of needed improvements out of their general funds if they had more control over roads in their jurisdiction.

Matt said the point of the menu of Joint Mitigation Strategies is if a land use agency really wants a development, even though LOS will degrade below ACHD’s desired standard, they have a consistent menu of strategies that has been agreed to by the land use jurisdictions that they can offer to the development community for consideration.

Elizabeth Conner stated that in the current economic climate, banks now have a 30 to 60 day turnaround on funding. It would be beneficial to have the banking community and the development community involved in developing the strategies. Elizabeth asked Patricia to schedule a meeting with Mayor Evans in his role as a developer.

Matt said that Options A and B do address what he thought would be in the menu, but thinks median treatments on roadways should be included as well. Patricia replied that could be addressed by adding "roadways" to B.

Patricia said it was always part of TLIP that in exchange for congestion we can at least get a more livable street, which is a VLOS. Mitigation is all about dealing with deficiencies and how they are described. And it has to be on a fair basis for everyone, which is more difficult multi-jurisdictionally.

Justin stated that for the first time a LOS standard, an average of LOS for all the different modes including pedestrian, bicycle, and transit, is being introduced in the Highway Capacity Manual. The problem is that it is so much harder to measure the bike and pedestrian LOS, because it is based on "comfort level" rather than actual capacity volume.

Anna questioned if all the cities could ever agree to use one list. Patricia said that is the question. Do the cities each have their own mitigation requirements, jurisdiction to jurisdiction with the highway district?

Justin replied that in his opinion, ACHD would be okay with it as long it was established with some type of understanding between each jurisdiction. And there will probably be jurisdictions that will never pursue something like this.

Matt said the goal was to have the menu options. Not every city has to utilize every option. So when there is a change in staff there is a list new staff can look at so that institutional memory is not lost.

D. Status Report - Cumulative Impacts Analysis on a Development – Justin Lucas

Agenda Item D was discussed under Agenda Item B - Review Variable Level of Service without Adequate Public Facilities Ordinance.

III. Action Items

A. Establish July 8, 2010, Steering Committee Agenda

After discussion, **the following agenda items were agreed to for the July 8 and August 5, 2010, Steering Committee meeting agendas:**

July 8, 2010, Steering Committee Agenda:

- **Information/Discussion Item: Status Report – Menu of Mitigation Strategies – Patricia Nilsson**

August 5, 2010, Steering Committee Agenda:

- **Information/Discussion Item: Status Report - Cumulative Impacts Analysis on a Development – Justin Lucas**

Blueprint for Good Growth
Steering Committee
November 4, 2010
Patricia Nilsson, Comprehensive Planning Manager, Boise City

Process to Determine Mitigation Options

At previous meetings, the Committee desired a discussion on how the application of an APF review would function, particularly if mitigation alternatives were necessary to act on an application. (*Do agencies agree that this is a desired level of review in the current economic climate?*) The process, in general terms, would proceed as follows:

1. Development application received by land use jurisdiction.
2. Application reviewed by ACHD. Determination that roadway capacity is or is not available to maintain ACHD adopted Level of Service.
3. If roadway capacity is not available, ACHD and land use jurisdiction(s) meet to review range of mitigation alternatives:
 - a. Phasing of development
 - b. Reduction of development
 - c. Provision of alternative transportation modes (transit, bike, or ped facilities)
4. ACHD Commission makes decision/recommendation to land use agency.
5. Land use jurisdiction acts on application.

This is not a complicated review, but it requires a commitment to coordination and communication among all parties. (*Is there agreement on this point?*) Several protocols or policies will need to be established before this process can be implemented:

1. Coordination between ACHD and land use jurisdictions may require an MOU to ensure responsibilities are clear on contacts/meetings with applicants, timing and content of technical review (e.g. TIS scoping), and timeliness of review.
2. A catalog of mitigation options for each jurisdiction needs to be completed. There was discussion at the June Steering Committee meeting regarding possible options. For the three options listed above, real time information on available capacity and programmed capacity will be needed. **Phasing of development** can be a mitigation option if additional capacity is funded in the FYWP. **Reduction of development** can be a

mitigation option only if real time capacity data is maintained by ACHD (or COMPASS?). **Capacity provided through alternative modes** will require development of a protocol that calculates capacity needs for systems accessible to the development (to establish rational nexus). This will require use of the existing pedestrian/bike facilities (which needs to be updated by ACHD) and the application of recommendations in the Roadways to Bikeways Plan and the existing transit plans (this requires more committee discussion). This may also require a shift away from just measuring vehicle trips generated from a development to person trips to ensure equitable mitigation options are applied to each development proposal. This topic requires further discussion by the committee.

At the last meeting, access management was discussed as a possible mitigation measure. After some thought, I don't believe this option is needed at this time until specific access management plans are produced that can measure that additional capacity is provided by implementing the plans. Newer corridor plan, such as the Lake Hazel Expressway, may have this information, and but upcoming plans for existing arterials, such as Fairview Avenue, are being planned to provide safety benefits. The plans would need to be modeled to measure additional capacity before mitigation options for APF could be identified.

I look forward to a robust discussion at the meeting!

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Blueprint for Good Growth

Steering Committee

November 4, 2010

Cumulative Impacts Tracking and Reporting – Test Case Summary

Over the past several months COMPASS and ACHD staff have been testing cumulative impacts tracking and reporting for an example development located in North Kuna near SH 69. The main purpose of the test was to identify staff resources, data needs, and technical issues associated with county wide cumulative impacts tracking and reporting at the development level. Based on the test case (supporting documentation attached) staff has identified several key issues with cumulative impacts reporting. These issues fall into the following categories:

1. Data Challenges

- a. The vacant lot inventory and demographic assumptions are the biggest challenges in terms of quality of data.
 - i. The parcel database contains inconsistencies that would need to be corrected prior to using the parcel file to establish a baseline condition. Some examples of inconsistencies are:
 1. The parcel data base includes residential or commercial zoning on parcels that are landscaped areas or micro-paths.
 2. The parcel data base includes lot divisions that are not lot splits (see example in attached documentation). These are typically due to taxing districts and other items.
 - ii. Changing the parcel data, which contains over 166,000 records, to account for the above mentioned inaccuracies and make it ready for county wide cumulative development tracking would require working with the Ada County Assessor's office about how common lots, landscaped areas, micro-paths are identified.
 - iii. A substantial amount of staff time would be required to identify all of these non-buildable lots in the inventory. The parcel file is updated as developments are final platted therefore, the time to clean up the added/new parcels would vary depending on development activity.
 - iv. Converting lots into demographics (population, households and jobs) requires making assumptions about probable uses of the vacant lot.
 1. Converting residential lots into housing units is straight-forward and easy to accomplish using vacancy and person per household rates from the census.

2. Non-residential lot conversion into jobs is more complex and difficult due to the wide range of potential uses and not knowing the square footage of the facility (highly dependent upon the number of floors). This has a direct influence on the estimate of trips generated. For example, trips generated by retail use could be up to 10 times higher than general office use.
 3. To increase the accuracy of the demographic data the City and County would need to be responsible for providing estimates of the land use for un-built commercial lots. If these estimates cannot be provided the cities and county should all formally concur on the method for estimating commercial demographics.
- b.** Progress over the past year was made on improving the quality of the information in the preliminary plat file however; it still contains many of the challenges described above such as expired or withdrawn plats, little detail about residential lots, and no information about commercial lot acreage or possible use.

2. Increase in Time to Maintain Reporting System and Prepare/Review TIS

- a.** Total hours expended by COMPASS staff to develop the base year demographics, conduct the vacant lot inventory, clean up of the preliminary plat information with each jurisdiction, convert lot inventory and preliminary plats into demographics, and setup/run the regional travel demand model was 300 staff hours. The majority (220 hours) of the time was spent developing base year demographics and working with the vacant lot inventory.
- b.** Based on the test case the additional time needed to complete a cumulative impacts review for a development would average between 15-25 hours per development (depending on the size). This additional time would be the responsibility of the TIS preparer. Some additional staff time from ACHD would also be required for review and support. Based on the test case it is likely that the overall time to prepare and review and TIS will be lengthened.
- c.** In cities where cumulative impacts' reporting is done to this level (Tallahassee, FL) they have 2 full time employees dedicated to tracking and monitoring the development approvals. It is likely that a similar number of fulltime staff would be required in Ada County.

3. Technical Issues

- a.** The model was used in the test case to generate the trips. There is a substantial difference between ITE trip generation values and model generated trip generation values. Model values typically provide generic results where as ITE trip generation manual has more specific trip generation values depending on the land-use type.
- b.** ACHD policy dictates the use of ITE trip generation manual for all TIS purposes. The test case showed that using the model to generate trips would not provide the detail that can be achieved through the ACHD approved ITE tripe generation values.

- c. The issue of trip generation is critical due to the effect that the number of trips can have on links and intersection level of service. After review the results from the test case ACHD and COMPASS cannot recommend using the model to generate trips for development review purposes.

Summary

Based on the test case COMPASS and ACHD staffs have significant reservations with the method for cumulative impacts reporting tested during this process. The data challenges, increase in overall time, and technical issues described above need to be examined and resolved prior to moving forward with county wide cumulative impacts reporting (as tested) at the development level. That being stated ACHD, through its new TIS Policy (August 2009), has stepped towards cumulative impacts review at the sub area level.

The new TIS policy requires a larger area of influence, and inclusion of known approved developments within the area of influence. The new policy described this requirement in the following section:

7106.8.4 Analysis of Background Traffic

This section shall include the existing conditions of the study area plus the background traffic that has been determined utilizing the approved COMPASS Model growth rate with the addition of traffic data from known developments (either built or unbuilt) within the approved study area that have necessitated and have provided a TIS. Developments that have been approved or have an active application with the lead land use agency shall be included and shall be identified in the report. Key points include:

- *Physical Characteristics (same as noted above in Section 7106.8.3)*
- *Traffic volumes which shall include daily and peak hour*
- *Level of Service*
- *Data sources*

This step towards cumulative impacts review in ACHD's new TIS Policy has not been significantly tested due to the lack of new development, but it has the potential to answer many of the concerns regarding cumulative impacts that have arisen through the BGG process.

Cumulative Development Test Case
 September 2010
 Blueprint for Good Growth

Proposed Development:

Napa/Springhill Vineyards is located west of SH 69 between Hubbard and Columbia Roads consisting of 241 acres with approximately 658 single family residential units, 600 multi-family units, 119 senior housing and 80 assisted living units.

The development is located west of SH 69 between Hubbard and Columbia Roads. It spans three TAZs – 1251, 1253 and 1254 bound by principal and minor arterials as shown in Figure 1.

Figure 1

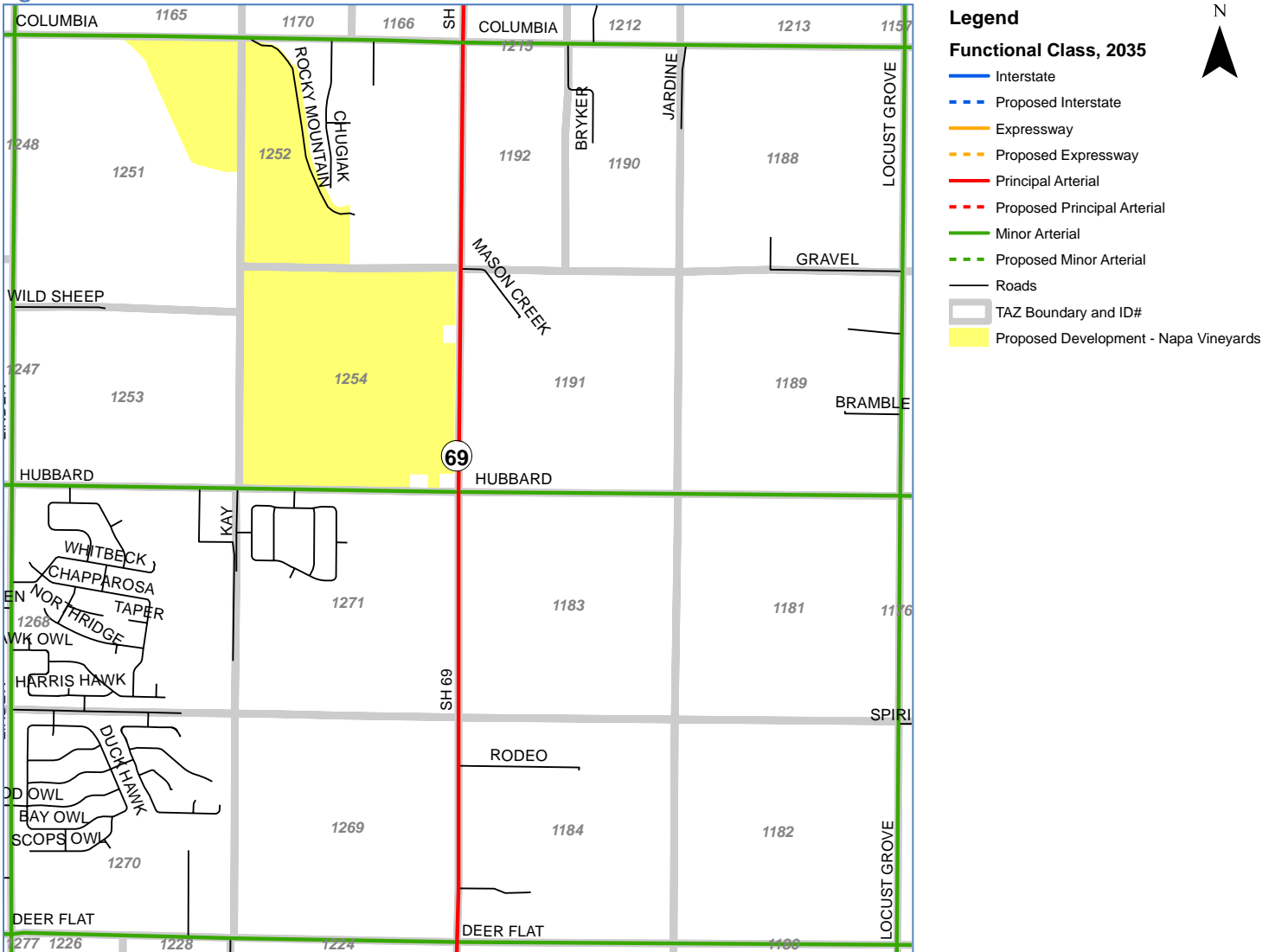


Table 1 summarizes the growth in the three TAZs spanned by the proposed development, Napa Vineyards.

Table 1

TAZ	Existing (2008 + permits)		Committed (Existing + Approved)		Proposed Development*		Committed + Proposed Development	
	Households	Jobs	Households	Jobs	Households	Jobs	Households	Jobs
1251	10	8	10	8	88	0	98	8
1252	31	10	34	10	180	57	214	67
1254	6	11	6	11	990	255	996	266
Total	47	29	50	29	1,258	312	1,308	341

*Does not include senior housing and assisted living units.

Table 2 summarizes the 2008 actual growth, 2035 demographics as reviewed by local jurisdiction, accepted by COMPASS' Demographic Advisory Committee and Board.

Table 2

TAZ	2008 Actual		2035 Demographics		Build Out Demographics	
	Households	Jobs	Households	Jobs	Households	Jobs
1251	10	8	672	8	1,706	39
1252	31	10	270	10	686	67
1254	6	11	6	11	15	87
Total	47	29	948	29	2,407	193

The following Figures 2 through 4 show the daily travel demand forecasts in the vicinity of the proposed development for existing, committed and committed plus proposed development.

Figure 2: Existing Daily Travel Demand Forecasts

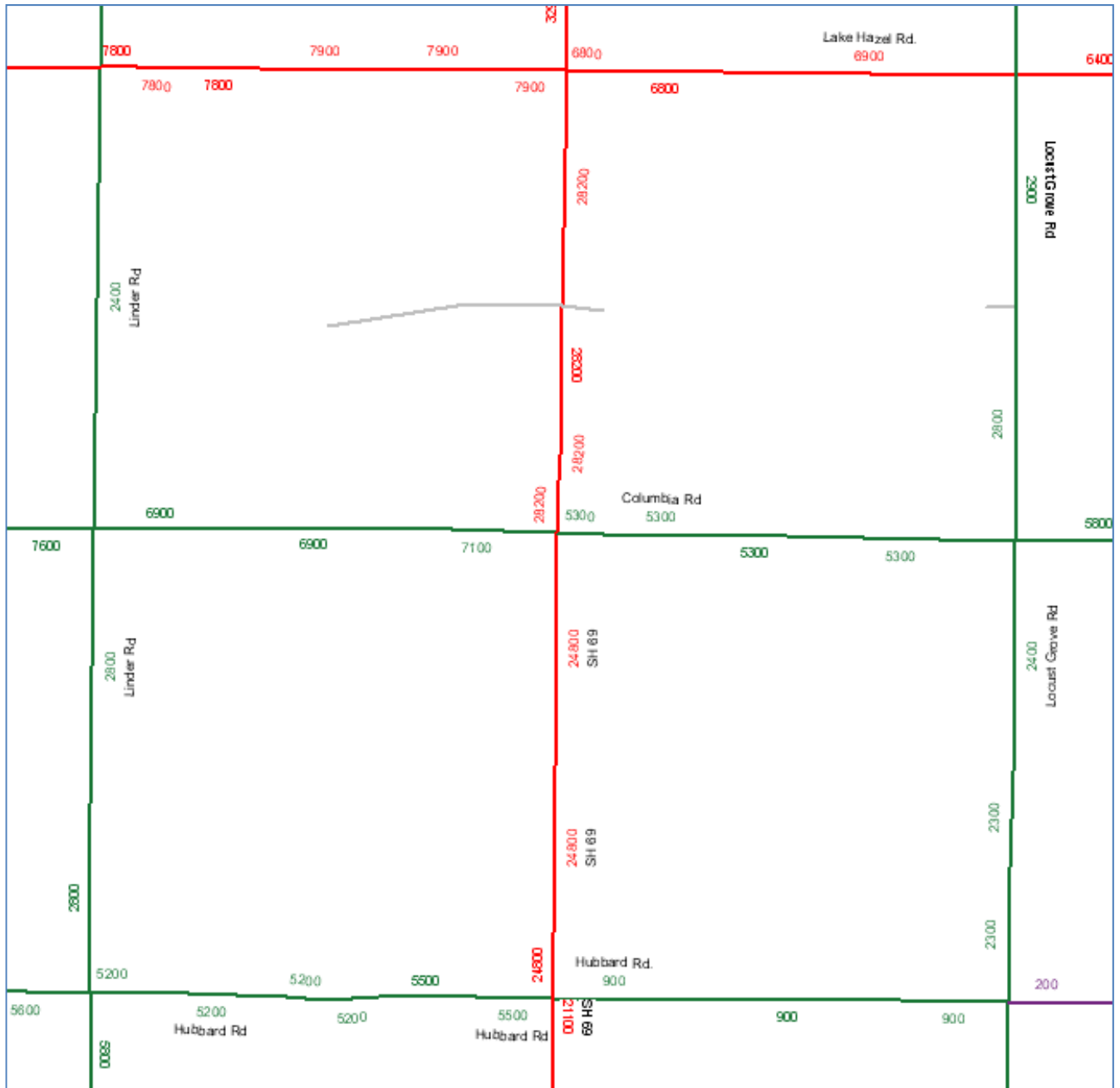


Figure 3: Existing Plus Committed Daily Travel Demand Forecasts

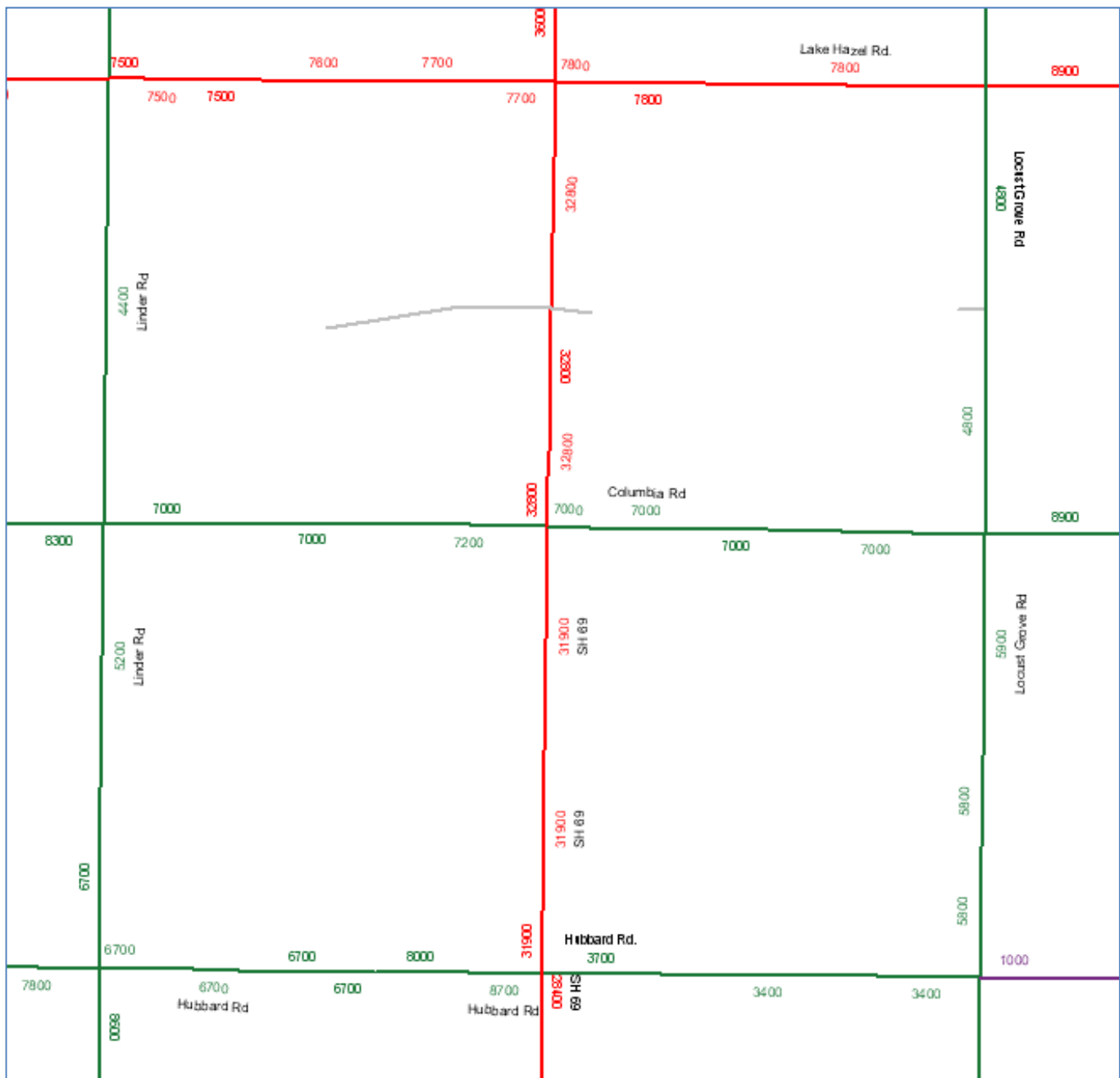
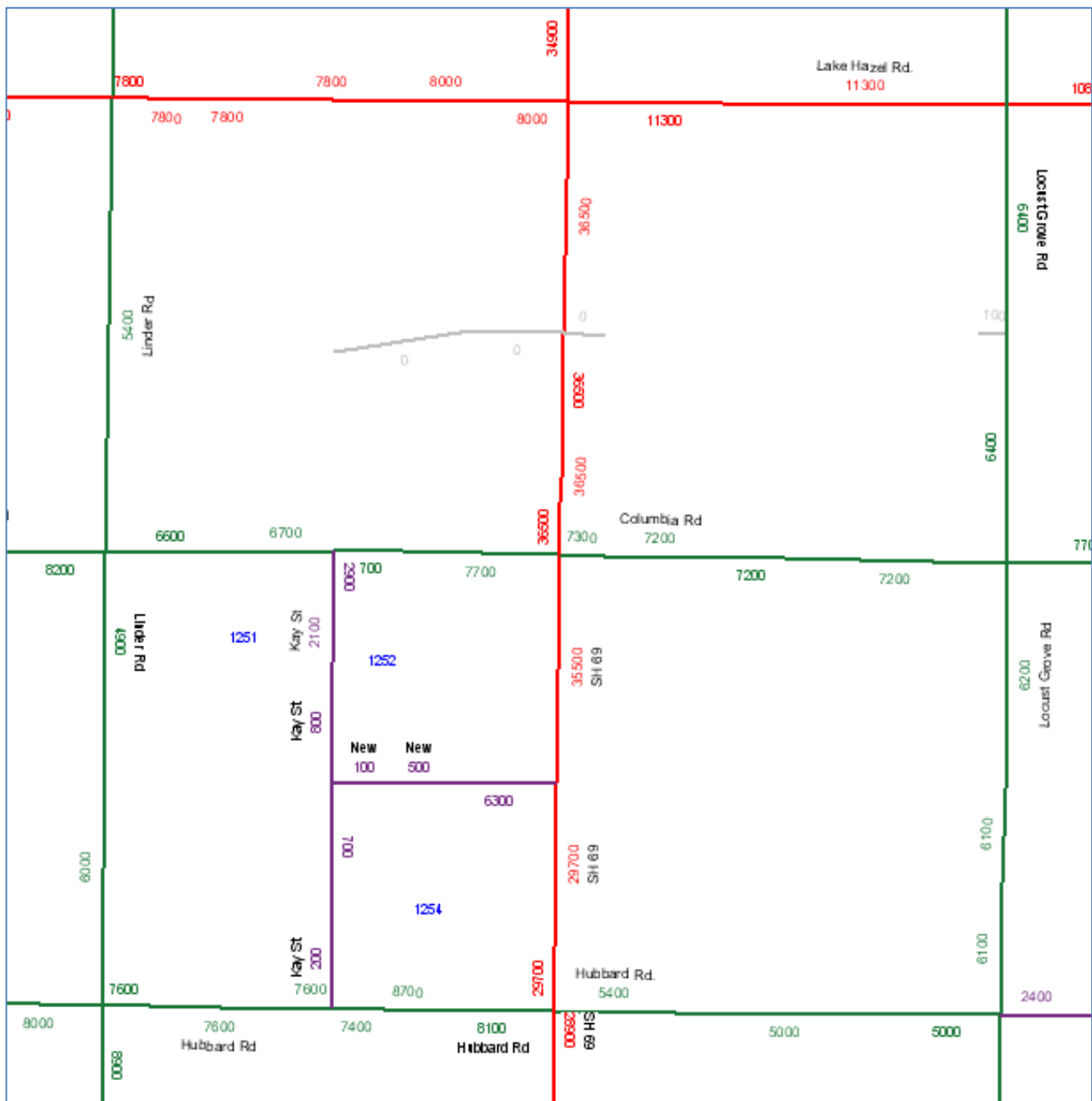
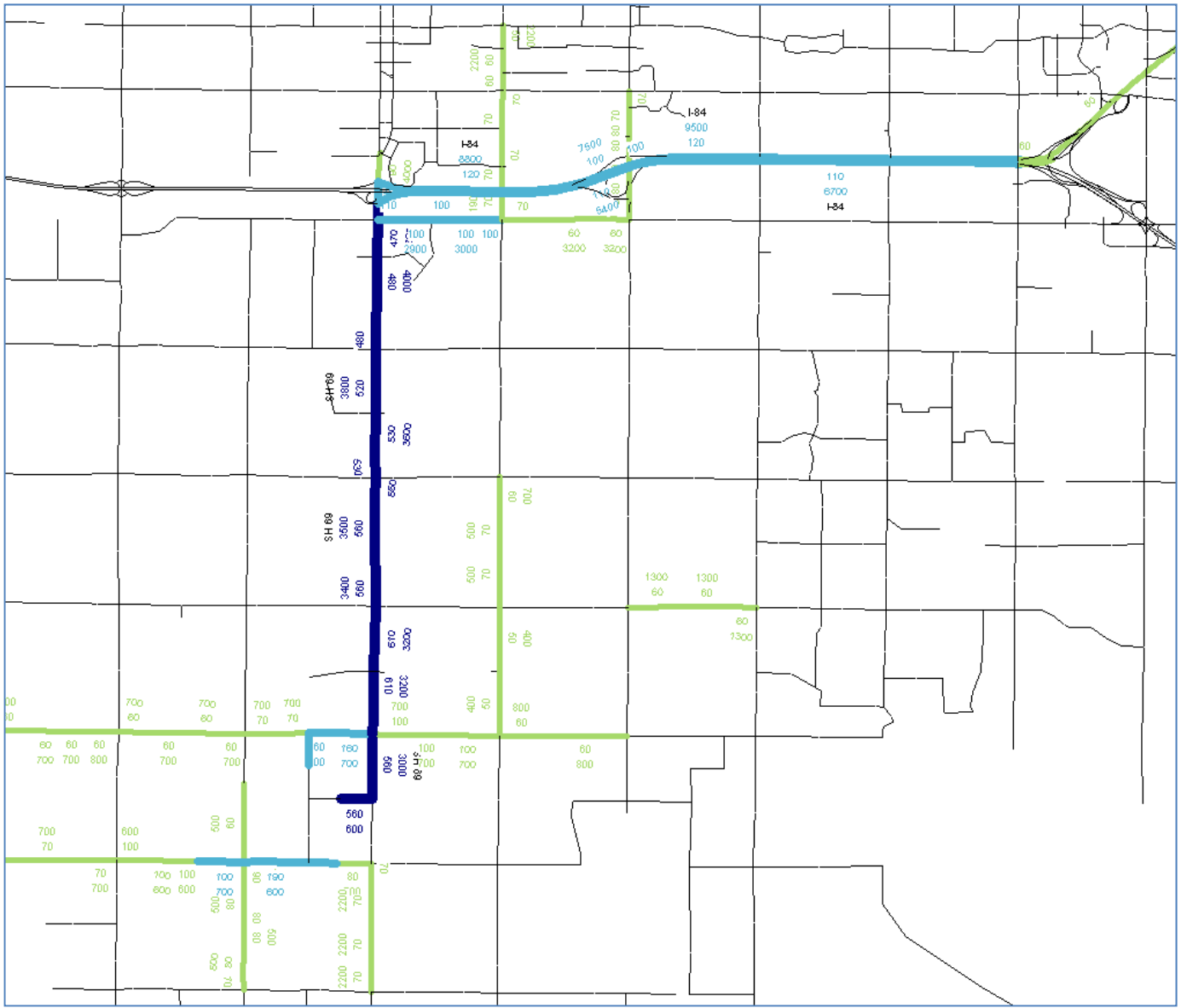


Figure 4: Existing Plus Committed Plus Proposed Development



Note: Kay St was extended between Hubbard and Columbia Roads and a new collector extended east as shown in the site plan contained in the TIS.

Figure 6: Peak Hour Area of Influence Trips, Proposed Development Demand of Total Peak Hour Demand



The following summarizes COMPASS staff tasks and time associated with providing data and support for cumulative impact analysis with a proposed development.

1. Base Year Estimate – annually update to demographics using building permit data and employment statistics from Department of Labor. The permitted residential units are assigned to traffic analysis zones (TAZs are the geography used in travel demand models), adjusted by an occupancy rate to estimate households (Census), calculated by person per household factor to estimate population for all TAZs. Department of Labor data is received annually requires review, editing, assigning to TAZ, and conversion of jobs by industry codes (NAICS 2002) to general employment categories.

- *120 hours (3 weeks)*

2. Existing Vacant-Platted Lot – annually create vacant-platted residential and commercial lot inventory. These lots are “building permit ready” and require very little (if any) additional review by land use jurisdiction.

- Inventory: requires using the parcel file and running a series of processes to extract vacant-platted lots for both residential and commercial.
 - *100 hours (2.5 weeks)*
(This does not include the time necessary for detailed review and clean up to remove common lots, planter strips, lot divisions and other oddities. Please refer to the five examples provided to see what issues inherently exist with parcel level data.)
- Quantification-residential: assign vacant-platted residential lots to TAZs and convert these to housing units. As explained above, the housing units are adjusted by an occupancy rate to estimate households (Census), calculated by person per household factor to estimate population for all TAZs.
- Quantification-commercial: assign vacant-platted commercial lots to TAZs and convert these to jobs. This requires using the total vacant-platted commercial acres per TAZ, adjusted by a “lot utilization” rate by area (how much of a lot is used for actual building structure), converted to jobs by a jobs per acre rate per TAZ. The “lot utilization” rate was estimated using parcel data that included the square feet of non-residential buildings divided by the total acres. Not all occupied parcels included square feet so this is based on records with all the data. The lot utilization rates are by sub-area because not all TAZs contain commercial development. The remaining acres are multiplied by jobs by type per acre ratio.
 - *32 hours (<1 week) does not include hours to update the lot utilization or jobs per acre rates.*

3. Preliminary Plat – annually update the preliminary plat table which requires COMPASS staff requesting the land use jurisdictions to review the information, provide updates to the data, corrections and in some cases additional details. After jurisdiction review and updates are sent back to COMPASS, staff incorporates the changes in the complete table. Preliminary platted lots, residential and commercial, are converted to population, households and jobs using the same process as outlined above under Task 2. Existing Vacant-Platted Lot.

- *56 hours (1.5 weeks)*

Calendar time is about four months for Tasks 1, 2 and 3 (actual work takes about 300 hours) which, would begin in January. All the data would be compiled and ready for analysis by April.

4. Proposed Development Analysis – proposed developments would be analyzed per COMPASS' development review and TIS review protocols thresholds (250 residential units or 25,000 square feet of commercial).

- *24 to 40 hours and varies dependent upon size, quality of data contained in site plan and complexity of the development.*

Challenges:

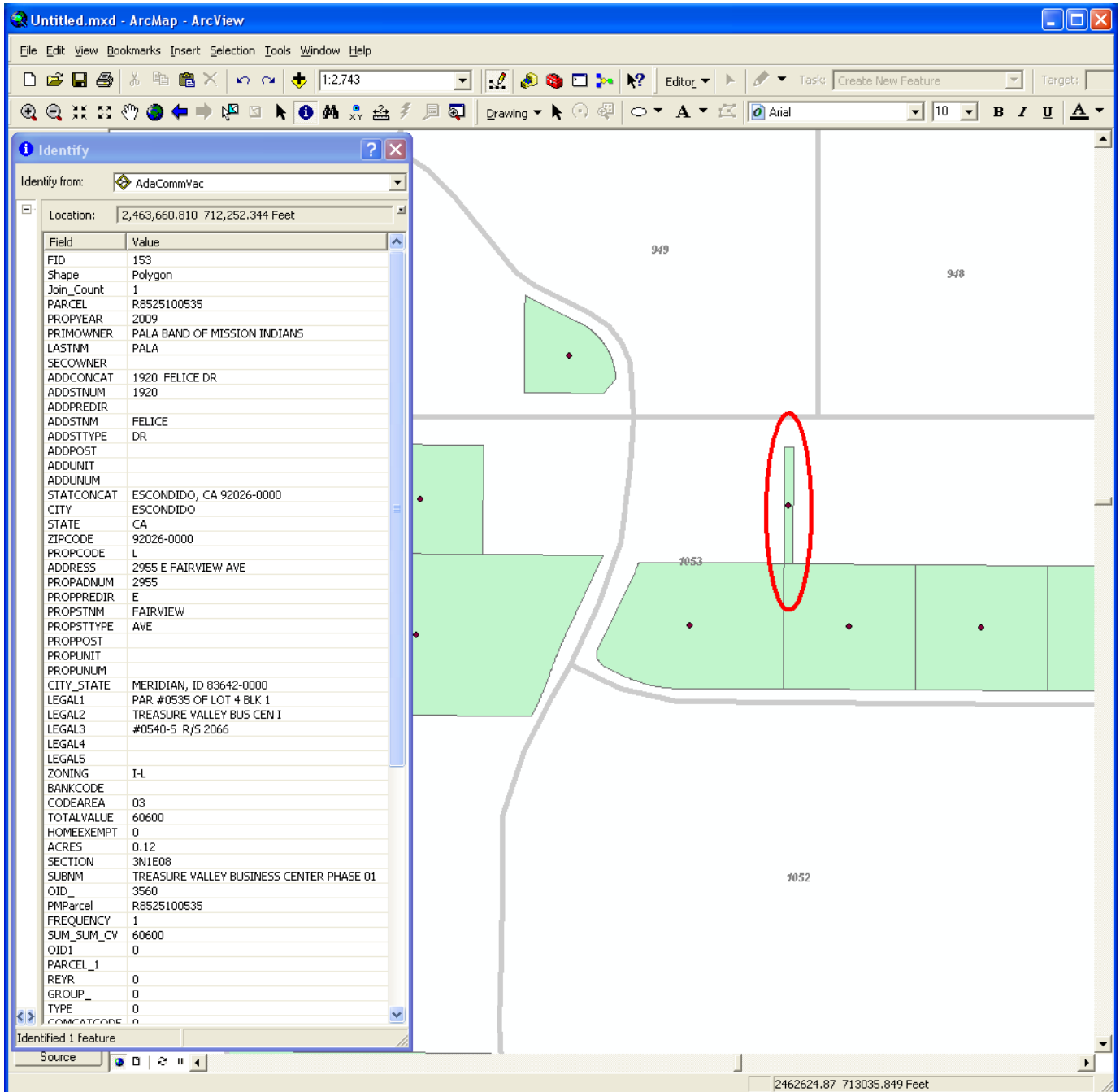
Preliminary plats will be updated and reviewed annually, only. This will help improve the quality of the data but, timing could be a challenge. When the information is sent to jurisdiction for review, providing any known changes or looming expiration dates will be helpful.

Another issue is inconsistent information about a development. For example, this proposed development, Napa Vineyards, is listed in the preliminary plat file comprising of 241 acres containing 1,349 residential lots and 0 commercial lots. However, the site plan in the TIS submitted to ACHD showed commercial buildings at the corner of SH 69 and Hubbard Rd and fronting Columbia Rd. This was further confirmed by reviewing the the trip generation summary table which included 173,000 square feet of neighborhood commercial. Napa Vineyards was picked for a test case due to its location, mix of uses and size. The inconsistent information was not recognized until the analysis was underway.

Vacant Lot identification and quantification for both residential and commercial are time consuming and challenging. The following examples show the challenges referenced above with conducting an existing vacant-platted lot inventory. These issues do not invalidate this process and may comprise of 5% to 10% of the data. However, their existence needs to be recognized and discussed. Even a detailed review, one square-mile at a time, will not make the data perfect because final platting continues to occur adding to the inventory.

Example 1:

The following example shows an easement with commercial zoning, low acreage, high value, adding only 0.12 acres of vacant commercial land in TAZ 1053.



Example 2:

The following example shows a large buffer/planter "lot" with commercial zoning, high acreage low value, and adding 1.63 acres of vacant commercial land in TAZ 947.

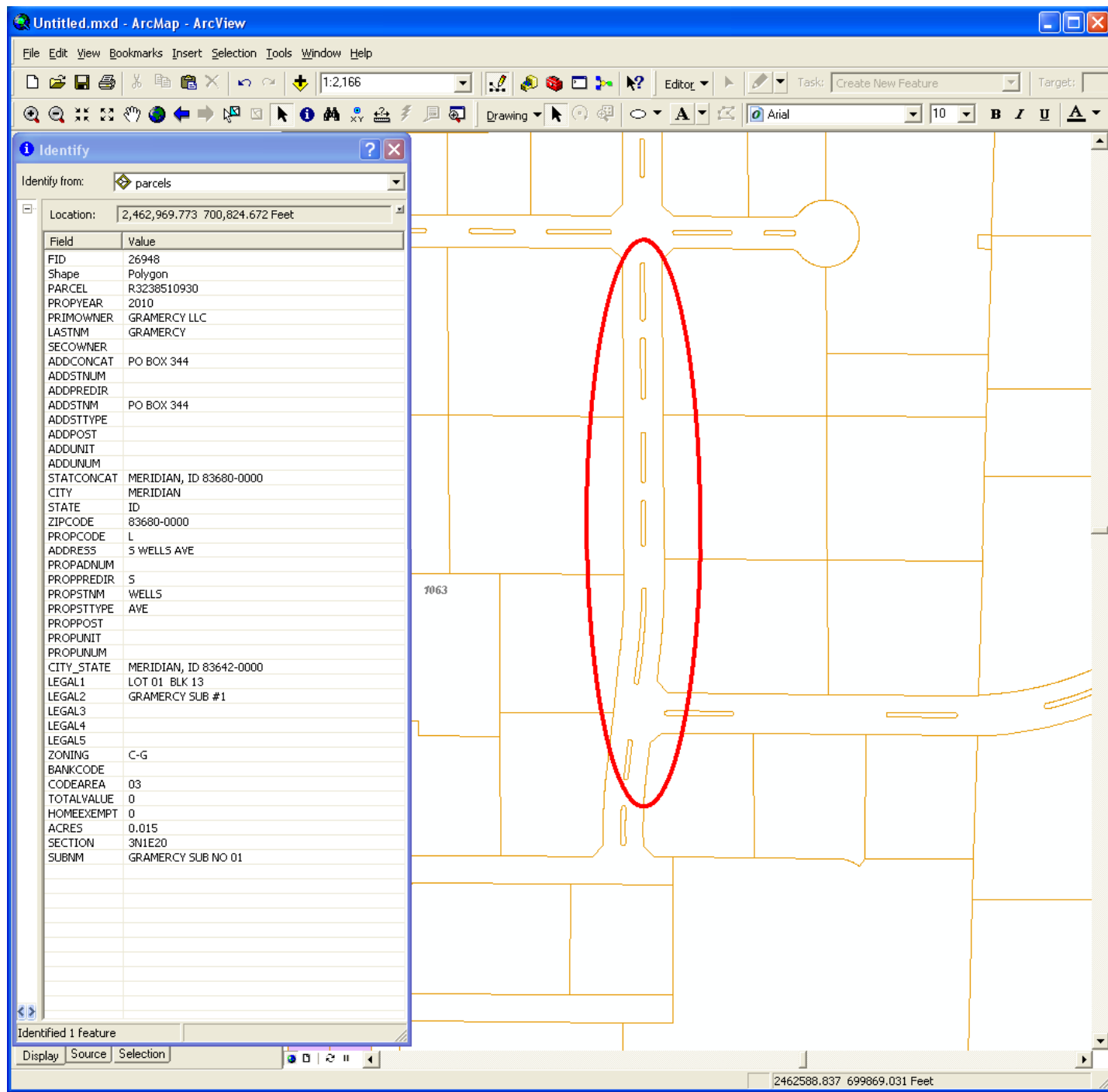
The screenshot displays the ArcMap interface with the Identify window open. The Identify window shows the following data for the selected feature:

Field	Value
FID	105
Shape	Polygon
Join_Count	1
PARCEL	R0619750060
PROPYEAR	2009
PRIMOWNER	FRED MEYER INC
LASTNM	FRED
SECOWNER	
ADDCONCAT	PO BOX 35547
ADDSTNUM	
ADDPREDIR	
ADDSTNM	PO BOX 35547
ADDSTTYPE	
ADDPOST	
ADDUNIT	
ADDUNUM	
STATCONCAT	TULSA, OK 74153-0547
CITY	TULSA
STATE	OK
ZIPCODE	74153-0547
PROPCODE	L
ADDRESS	N AVEST LN
PROPADNUM	
PROPPREDIR	N
PROPSTNM	AVEST
PROPSTTYPE	LN
PROPPOST	
PROPUNIT	
PROPUNUM	
CITY_STATE	MERIDIAN, ID 83646-0000
LEGAL1	LOT 6 BLK 1
LEGAL2	AVEST PLAZA SUB
LEGAL3	#95070361
LEGAL4	
LEGAL5	
ZONING	C-G
BANKCODE	
CODEAREA	03
TOTALVALUE	10000
HOMEEXEMPT	0
ACRES	1.63
SECTION	3N1E05
SUBNM	AVEST PLAZA SUB
OID_	163
PMPParcel	R0619750060
FREQUENCY	1
SUM_SUM_CV	10000
OID1	0
PARCEL_1	
REYR	0
GROUP_	0
TYPE	0
COMCATCODE	0

The map shows several parcels highlighted in green, with TAZ 947 being the largest. The Identify window is positioned over one of these parcels, showing its detailed attributes. The map interface includes a toolbar at the top and a status bar at the bottom showing coordinates: 2459971.909 713759.817 Feet.

Example 3: Planter Strips with no value

The following shows planter strips with no value therefore, not in the vacant lot inventory. This is a good example of what is needed in the parcel file to make the process better and improve accuracy.



Example 4:

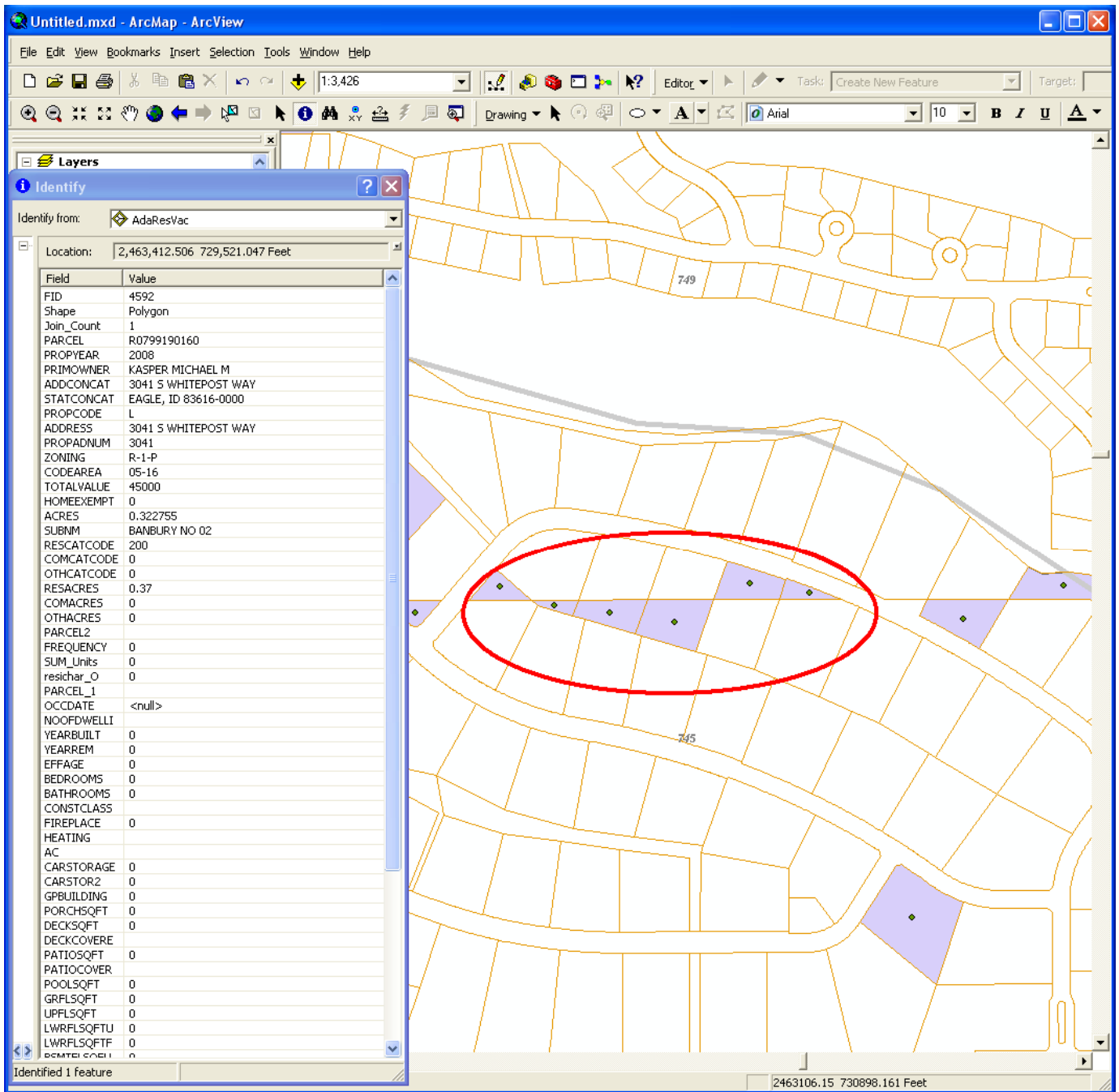
Examples 4 and 5 show lot divisions that are not really separate parcels. This example displays the data in the parcel file for the occupied lot and example 4 displays the data in the parcel file for the “vacant” lot that really isn’t vacant.

The screenshot shows the ArcMap interface with an Identify window open over a parcel map. The Identify window displays the following data for the selected parcel:

Field	Value
FID	73714
Shape	Polygon
PARCEL	R0799190150
PROPYEAR	2010
PRIMOWNER	KASPER MICHAEL M
LASTNM	KASPER
SECOWNER	
ADDCONCAT	3041 S WHITEPOST WAY
ADDSTNUM	3041
ADDPREDIR	S
ADDSTNM	WHITEPOST
ADDSTTYPE	WAY
ADDPOST	
ADDUNIT	
ADDUNUM	
STATCONCAT	EAGLE, ID 83616-0000
CITY	EAGLE
STATE	ID
ZIPCODE	83616-0000
PROPCODE	R
ADDRESS	3041 S WHITEPOST WAY
PROPADNUM	3041
PROPPREDIR	S
PROPSTNM	WHITEPOST
PROPSTTYPE	WAY
PROPPOST	
PROPUNIT	
PROPUNUM	
CITY_STATE	EAGLE, ID 83616-0000
LEGAL1	LOT 14 IN FLOOD BLK 2
LEGAL2	BANBURY NO 2
LEGAL3	
LEGAL4	
LEGAL5	
ZONING	R-1-P
BANKCODE	
CODEAREA	05-18
TOTALVALUE	380900
HOMEEXEMPT	-101153
ACRES	0.73
SECTION	4N1E20
SUBNM	BANBURY NO 02

The map shows a grid of parcels outlined in orange. A red oval highlights a specific parcel in the center. The status bar at the bottom indicates the current location: 2463534.454 730850.572 Feet.

Example 5:



T:\FY10\700 Services\761 Blue Print for Good Growth\2010Test_MW\2010bgg\Cumulative Development Test Case.docx

Cumulative Impacts LOS Evaluation

The following document reports the results of the Level of Service (LOS) analysis for Napa/Spring Hill Vineyards. The results include the LOS analysis for existing conditions, existing with committed un-built and existing with committed un-built with the proposed development.

Table 1 and Table 2 below summarizes the results for intersections and road segments respectively.

Table 1: LOS analysis for intersections

Signal Location	Signal Control Type	2010		2010 Committed*		2010 Committed with Proposed Development [#]		Comments
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	
Linder & Columbia	AWSC	B	12	C	22.1	C	21.3	
Linder & Hubbard	AWSC	B	12	D	27.7	E	40.4	
Linder & Deer Flat	Signal Control	C	26.3	C	35	D	36.9	
SH-69 & Amity	Signal Control	C	37.6	F	107.6	F	86.2	
SH-69 & Columbia	Signal Control	C	26.9	C	21.6	C	25.8	
SH-69 & Overland	Signal Control	D	46	F	85.3	F	90.3	
SH-69 & Victory	Signal Control	C	26.7	C	34.9	D	44.4	
Ten Mile & Hubbard	TWCS	D	26.3	F	274.8	F	165.1	
Back Cat & Hubbard	TWSC	-	-	-	-	-	-	Hubbard is minor street with limited connectivity
Locust Grove & Lake Hazel	TWSC	C	15.6	F	1964	F	753.5	
SH-69 & Hubbard	TWSC	D	34	F		F	13333	
SH-69 & Lake Hazel	TWSC	F	9445	F		F		
Locust Grove & Columbia	AWSC	B	10	C	16.8	D	34.7	

* 2010 Committed: Includes all existing demographics with vacant and committed but unbuilt. The network includes all projects funded in the FYWP

[#] 2010 Committed with Proposed Development: Existing demographics with vacant , committed unbuilt and proposed development with all funded projects in the FYWP

For two way stop control pick the LOS for the critical movement

Table 2: LOS analysis for road segments

Street Segment			2010		2010 Committed*		2010 Committed with Proposed Development#	
Segment	From	To	VC Ratio	LOS	VC Ratio	LOS	VC Ratio	LOS
SH-69	Overland	Victory	0.87	D	1.09	F	1.06	F
SH-69	Victory	Amity	0.77	D	0.99	E	0.99	E
SH-69	Amity	Lake Hazel	0.65	C	0.82	D	0.85	D
SH-69	Lake Hazel	Columbia	0.66	C	0.85	D	0.88	D
SH-69	Columbia	Hubbard	0.54	C	0.80	D	0.82	D
Linder	Columbia	Hubbard	0.19	C	0.39	C	0.31	C
Linder	Hubbard	Deer Flat	0.39	C	0.36	C	0.57	C
Linder	Deer Flat	Kuna	0.38	C	0.42	C	0.43	C
Locust Grove	Amity	Lake Hazel	0.17	C	0.25	C	0.25	C
Locust Grove	Lake Hazel	Columbia	0.10	C	0.40	C	0.35	C
				C				
Columbia	Linder	Meridian	0.60	C	0.61	C	0.67	D
Columbia	Meridian	Locust Grove	0.33	C	0.49	C	0.52	C
Hubbard	McDermott	Black Cat	0.02	C	0.06	C	0.02	C
Hubbard	Black Cat	Ten Mile	0.01	C	0.61	C	0.54	C
Hubbard	Ten Mile	Linder	0.04	C	0.50	C	0.47	C
Hubbard	Linder	Meridian	0.31	C	0.41	C	0.47	C

Tasks and Timelines

I. Data Collection

Data collection comprises of collecting link volumes and turning movements for intersections. Link volumes are collected using traffic counters installed on the respective link. The man-hours include travel time to install and dismantle the counter at the respective locations. This would approximately be 1-2 man-hours.

Intersection volumes require the physical presence of 1 or 2(for larger intersections) staff at the location. Including travel time the approximate time to count an intersection is 3-6 hours for PM peak hour.

Hours:

Intersection: 41 hours

Links: 32 hours

II. Determining Intersection Turning Movement

This is determined by using existing counts and forecasted link volumes. The turning movements need to be determined for

- a) Existing conditions
- b) Existing conditions with committed un-built
- c) Existing conditions with committed un-built and proposed development included

Level of effort is approximately 0.5 hours per intersection

Hours: $13 \times 0.5 = 6.5$ hours

III. Determining Level of Service (LOS) for link and intersection

Link LOS is determined using planning thresholds established for each link type. The link volumes are compared against the established planning threshold LOS values.

The overall Level of effort this task is approximately 2 hours. This includes a certain level of post-processing. This is included in the level of effort.

Intersection LOS is determined by Highway Capacity Manual methodology for the respective signal control type. This has to be determined for

- a) Existing conditions
- b) Existing conditions with committed un-built
- c) Existing conditions with committed un-built and proposed development included

Level of effort is approximately 0.5 hours per intersection.

Hours: $13 \times 0.5 = 6.5$ hours

IV. Tabulating, mapping and compiling results

Hours: 2-3 hours

Total hours: Approx. 91 hours

The time taken to prepare normal TIS would be 80-85 hours (assuming the approved un-built is not included).

Additionally, ACHD staff reviewing the TIS normally takes 8-40 hours to review a TIS depending on the size of the development. The extra effort to analyze the additional work involving the committed un-built would increase the level of effort by 10-15%

Challenges:

The TIS for Napa Vineyards was completed in 2008. ACHD's new TIS policy was adopted in 2009. Hence this does not include all elements of the new TIS policy.

I. Traffic data collection

Traffic data collection is a substantial effort. Depending on the staff availability this effort could be a few weeks to a few months to be completed. To hasten the process outside contracting agencies might be to be availed for timely completion.

The location of Napa Vineyards is out of the urban areas of the county. There is no historical data collected. Majority of the intersections have not been under any evaluation radars. And hence the analysis was completed with limited data and estimation methods for the intersections. Link volumes were, for the most part, up to date.

II. Difference in Trip Generation: Model results vs. ITE trip generation

Trip generation values are statistical values based on data. The travel demand model is based on travel survey completed by COMPASS. Additionally, ITE values are more land-use specific unlike travel survey data which is more generic.

Table 3 shows a comparative chart for trip generation values between the TIS and model results:

Table 3

<u>Data Source</u>	<u>New Daily trips</u>	<u>New PM peak hour trips</u>
ITE	21,256	2,188
Travel Demand Model	15,000	900

There can be substantial differences between the TIS and model generated values. While both methods are right, there can be debates as to which method would be more appropriate.

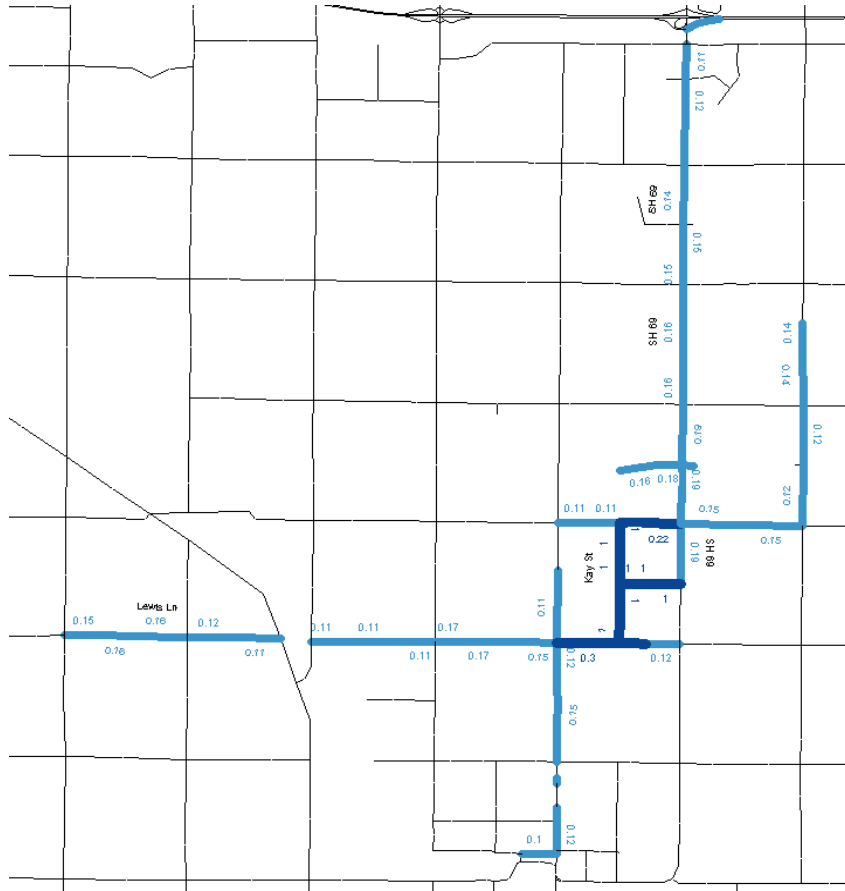
As per ACHD’s current TIS policy, all TISs will have to use ITE trip generation manual to determine the total trips produced.

III. Trip Distribution

Trip distribution in the model is based on the size of adjoining land-use. The TIS distribution is based on the logical judgment. There can be substantial differences in the results of the distribution methods.

IV. Defining Area of Influence

There is a substantial difference between the TIS reported area of influence and model defined area of influence. The TIS area is limited compared to the model results. Figures below show the difference in area of influence.



Area of influence from Travel Demand Model



Area analyzed in TIS

As described earlier, the Napa Vineyards TIS was completed before the completion of ACHD's updated TIS policy, which will address this issue in the future. As per the current ACHD's TIS policy, the area of influence will be set by the travel demand model. The area of influence will include all links and segments influenced by the development over 10 % threshold. The segments and intersections under this area of influence will have to be analyzed by a TIS preparer.
