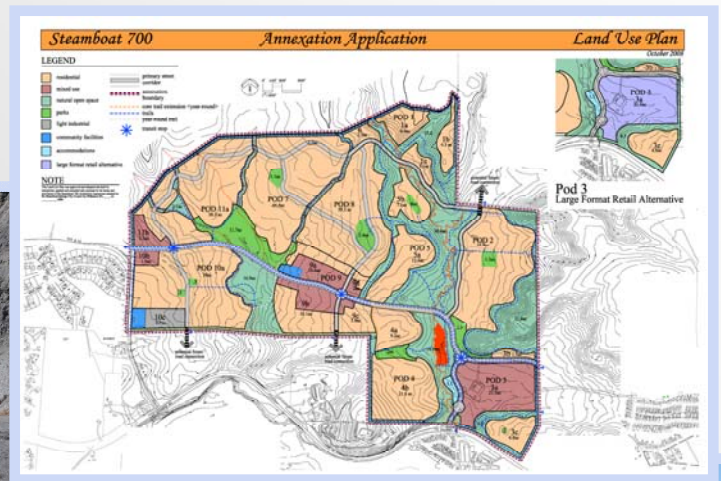


Steamboat 700

Annexation Transportation Study

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1.0 Introduction

The West Steamboat Springs Area Plan (original 1999 Plan and 2006 Update) identifies the area generally west of Steamboat Springs, east of Steamboat II and north of US 40 as the location for future higher density residential and supporting commercial development in the Steamboat Springs area. Transportation access to this area west of Steamboat Springs in the US 40 corridor has always been an important consideration. The West Steamboat Springs Area Plan (WSSAP) identifies the importance of:

- a land use mix that will encourage internal trip making and minimize the demand for traffic access to the downtown area;
- a development pattern that promotes walking and bicycling for local trips;
- a development pattern that can be efficiently served by transit;
- a multimodal transportation network that helps minimize the need for automobile travel;
- the construction of the New Victory Parkway as parallel capacity to US 40 west of CR 129 (Elk River Road);
- improvements to US 40 between Elk River Road and 13th Street.

The Steamboat 700 property encompasses most of the development area within the WSSAP area as illustrated on the attached Figure 1. The Land Use Plan for the proposed Steamboat 700 project is attached to this report for reference.

The purpose of this Annexation Transportation Study is to:

- Quantify the anticipated travel demand increases that will be generated by the proposed land uses in the Steamboat 700 project.
- Provide an overall trip generation, distribution and traffic assignment analysis for the Steamboat 700 site for use in the US 40 NEPA study. The NEPA study will soon be initiated and will be identifying potential transportation capacity improvement measures in the US 40 corridor that will need to be put in place by the community to accommodate future traffic increases.
- Identify the potential for the Steamboat 700 project to minimize the automobile travel demand in the US 40 corridor through the use of alternative modes, trip making with both an origin and destination on-site, multi-purpose trip linking on-site, and providing goods and services for trips that are already traveling past the site on US 40.
- Provide a baseline for use by future traffic studies that will be prepared for specific development phases. These future studies will provide a more detailed evaluation of intersection-specific traffic operations, levels of service, and necessary on-site improvements as the Steamboat 700 Plan is refined and implemented over time.

- And finally, this study will provide the basis for developing a cost sharing model for off-site capacity enhancements in the US 40 corridor. This model can be used to help define necessary annexation agreements and help keep the annexation schedule on track.

2.0 Proposed Land Uses

The Land Use Plan for Steamboat 700 includes a total of approximately 2,044 new dwelling units (of a variety of residential densities), and 340,000 sq. ft. of non-residential floor area. The non-residential space incorporates a mix of small format retail, office, hotel, restaurant, and light industrial/service uses. The Land Use Plan (copy attached) illustrates the development areas within the overall site and the primary roadway network that will serve the area. Table 1 includes a breakdown of the land uses by pod within the project. The commercial development will include a mixed use Village Center area located in Pod 3 with proximity and access to US 40. Another mixed use commercial development will be centrally located in Pod 9. There will also be some light industrial/service uses and civic type uses (fire station, maintenance yards, etc.) in Pods 10 and 11 on the western edge of the site.

An Alternative land use plan has also been prepared for the Village Center area in Pod 3 located at the main entrance to the site off of US 40. This Alternative replaces some of the residential units and small format retail uses with large format retail space designed to serve a wider portion of the community. All other pods remain the same in the Large Format Retail Alternative. In this Alternative, the overall dwelling unit count has been reduced to 1,818 units and the non-residential floor area has been increased to 539,000 sq. ft. for the entire development. This land use alternative is detailed at the pod level in Table 2.

3.0 Proposed Transportation Network and Site Access

Automobile Access and Circulation

The primary new roadways that will provide access to and through Steamboat 700 are illustrated in Figure 2 (clearly, there will be numerous additional local roadways within and between the development pods that are not illustrated on this Figure) and described below. The Steamboat 700 project will be responsible for building the portions of these roadways within the project boundaries.

- The New Victory Parkway will be an east-west roadway extending from the CR 42 corridor on the west edge of the Steamboat 700 property, traversing across the center of the project, and extending east beyond the Steamboat 700 project to intersect with Downhill Drive and Elk River Road. This new arterial roadway will have a single through lane in each direction and on-street bicycle lanes. It will not only serve the individual

developments along its length, but will also provide parallel east-west capacity to the US 40 corridor.

- Steamboat West Boulevard will provide the main access to the site and will intersect US 40 in the village center area in the eastern portion of the project. Steamboat West Boulevard will extend north to the New Victory Parkway. This new access onto US 40 is in the approximate location of the existing Sleepy Bear Mobile Home Park access driveway on the opposite side of the highway, and is consistent with the recently adopted US Highway 40 Access Plan. It will serve traffic accessing the Village Center from US 40 and will also serve as one of the primary residential access points. There is excellent sight distance along US 40 in the vicinity of this new access roadway. It is anticipated that this new intersection on US 40 will warrant a traffic signal and will be served by appropriate auxiliary lanes. It is anticipated that roundabout intersections will be constructed at the main parking lot access intersection and the New Victory Parkway intersection.
- The Slate Creek Connector (generally along Slate Creek) will extend from the New Victory Parkway, north through the eastern portion of the Steamboat 700 site to the southern boundary of the adjacent Scott property. As other properties are developed the Slate Creek Connector will continue around the north end of the airport to intersect with CR 129. This connection was identified in the WSSAP. When completed, it will provide parallel north/south capacity to CR 129.
- A future roadway connection from the Steamboat 700 site to the US 40 corridor is anticipated when the adjacent Gun Club property is redeveloped by others. This connection will serve as a secondary access to the central portion of the site. The future intersection on US 40 will be located where there is adequate sight distance along the highway. It is likely that this new intersection on US 40 will also warrant a traffic signal when the Gun Club site is redeveloped and the connection to the Steamboat 700 site is completed. The location of this new intersection is approximately ½ mile west of the Steamboat 700 main access intersection, and has been included in the recently adopted US Highway 40 Access Plan.
- The New Victory Parkway will provide access to the County Road 42 corridor on the west edge of the Steamboat 700 site. CR 42 will then provide access to US 40 at the existing intersection which has already been upgraded with acceleration and deceleration lanes. This intersection is located approximately ½ mile west of the future new Gun Club access intersection, and should work well if a traffic signal is warranted in the

future. The US 40/CR 42 intersection has also been identified as a “full movement intersection” in the US Highway 40 Access Plan.

A detailed network of local roadways will be provided within each development pod and between the development pods to provide the necessary local transportation access. These local roadways will also extend to adjacent properties as illustrated on the Land Use Plan. Internal roadways will be illustrated in more detail in future Preliminary Plat submittal documents.

The “Form Based Code” (FBC) that is being developed for this project defines a hierarchy of roadways with specific cross sections, block lengths, streetscape standards, etc. to help Steamboat 700 achieve its “neo-traditional neighborhood” vision. The FBC illustrates the location of the primary roadways by type within the site. The FBC stresses the need for multi-modal connectivity in the layout of the transportation grid, and will help make sure that the project is developed at a scale and in a form that maximizes mobility for all travel modes and reduces automobile travel.

Bicycle and Pedestrian Access and Circulation

Sidewalks will be provided along both sides of most roadways throughout the site as detailed in the Form Based Code. In some cases, topography and/or proximity to an adjacent trail may result in a sidewalk being provided on only one side. Mid-block pedestrian “paseos” will be located in some areas to minimize block lengths and maximize pedestrian connectivity. Curb extensions or bulbouts will be provided in some areas to minimize pedestrian crossing distances and maximize safety.

An extensive trail network is being developed that will utilize roadway and greenway corridors throughout the site as well as traversing the outer perimeter of the site. It will provide access to and between all the pods and to adjacent properties. Trail underpasses of major roadways such as New Victory Parkway and Steamboat West Boulevard are proposed, as illustrated on the attached Walkability/Trails Plan. Enhanced at grade crossing treatments will be provided where trails must cross roadways at-grade.

The trail network will include a multi-purpose trail underpass beneath US 40 and a connection to the Core Trail (when that trail is extended west to the Sleepy Bear area). On the Steamboat 700 site this branch of the Core Trail will extend from the US 40 underpass, north along Slate Creek (parallel to Steamboat West Boulevard), to the New Victory Parkway, and then west parallel to New Victory Parkway, south to the southern perimeter trail and out to the CR 42 corridor. This branch of the Core trail through the Steamboat 700 site will serve as an off-

road pedestrian and bicycle spine through the project and will help tie together all the other trails serving development pods.

Transit Access and Circulation

It is anticipated that the Steamboat Springs Transit (SST) bus service will access the Steamboat 700 site and provide an alternative to the automobile for access to areas throughout the community. A bus loop through the site that utilizes Steamboat West Boulevard, New Victory Parkway, and CR 42 was identified in preliminary discussions with SST staff. On-site roadways that will carry SST service are being designed to accommodate the bus traffic.

Three primary transit stops within the Steamboat 700 site are anticipated. One would be in the Village Center area north of US 40, another would be in the central commercial area along New Victory Parkway (Pod 9), and a third would be along New Victory Parkway in the western end of the project. A Walkability Analysis has been prepared for this project (see attached Figure) which indicates that 100% of the commercial areas and 72% of the residential units will be within a ¼ mile radius of one or more of these transit stops. This indicates that the site will have excellent proximity to transit service. Virtually 100% of the residential units will be within ½ mile of a transit stop, which is generally considered a walkable scale for work trips accessing transit.

It is anticipated that bus service on a 20 minute frequency will be provided by SST for most of the day when the site is fully developed. Specific bus routing, stop locations and bus stop amenities will be refined during the planning for future development phases while working closely with SST staff.

The WSSAP discussed the need for a “transit center” in the Village Center area although it did not specify what should be included. In the context of Steamboat 700, the three primary transit stops referenced should each function as “transit centers” or “super stops” and include as many of the following as possible:

- located in an inviting, attractive and interesting streetscape environment
- proximity to retail shops, sidewalk cafes, etc.
- uninterrupted sidewalk access
- paved waiting area behind the curb
- heated shelter on a paved pad with benches inside and outside the shelter
- bike racks
- at least one stop, such as at the Village Center, should include an indoor seating area (possibly with lockers and restrooms) in association with an adjacent public facility or commercial building

- at least one stop should have bike lockers available (possibly within an adjacent building)
- informational kiosk
- street lighting and pedestrian scale lighting in the area
- at least one stop should have proximity to a parking reservoir near a retail facility to allow some residents to “park-and-ride”
- on-street parking to be prohibited at the bus stop to allow buses to stop against the curb (bus pullouts not recommended).

In this context a transit center “building” or station in the Village Center area is not needed and not recommended.

4.0 Anticipated Trip Generation

A trip generation estimate has been prepared for each of the land use alternatives described above. Table 1 includes the specifics of this analysis for the Land Use Plan without large format commercial, and Table 2 details the analysis for the Alternative with large format retail adjacent to US 40. Each tabulation includes the following:

- Specific land uses for each development pod;
- Automobile trip generation rates (daily and peak hour) for each land use based on information in the Institute of Transportation Engineers (ITE) Trip Generation Manual (7th Edition);
- Automobile trip reduction factors including:
 - multi-modal trip reduction factor to account for trips made as a pedestrian, a bicyclist, or on transit
 - internal trip and multipurpose trip factor to account for trips between residential and commercial land uses within the site that never access US 40, and trips that stop at multiple destinations within the site
 - pass-by trip reduction factor to account for traffic that is already bypassing the site on US 40 and will now divert onto the site to access one or more of the land uses without adding new traffic to US 40
- Daily trips generated by the site before any reduction factors are taken
- Daily and peak hour (AM and PM) weekday traffic external to the site after accounting for the various trip reduction factors.

Land Use Plan Without Large Format Retail

It can be seen in Table 1 that if we use national average automobile trip generation rates for the individual uses, with no trip reductions, the proposed land uses in Steamboat 700 would generate approximately 27,800 automobile trips per day when the site is fully developed. That said however, we do not

anticipate that there will be anywhere near that much traffic accessing the site from US 40. In fact, we project that there will be only approximately 17,600 additional automobile trips per day that access the roadways surrounding the Steamboat 700 project. To arrive at this projection we utilized the trip reduction factors listed above. Specific trip reduction factors that were applied to the individual land uses have been developed based on a range of technical publications, and our experience in other communities that aggressively support alternative travel modes. These trip reduction factors have been discussed with City transportation and planning staff and are described below:

Multi-modal Trip Reductions

- A multi-modal reduction of 15% was applied to all residential trip generation in the project due to the range, mix, and proximity of land uses, the extensive network of pedestrian and bicycle trails, and the availability of SST service. We anticipate that this estimate is conservatively low. It should be noted that approximately 1/3 of these multi-modal trips (5%) are anticipated to use SST bus transit.
- Commercial uses in the neighborhood centers were also given a 5% to 15% multi-modal trip reduction, depending on the use, for the same reasons.
- The commercial uses in the Village Center area along US 40 were given a lower multimodal trip reduction factor of 5% (grocery store and hotel) to 10% (restaurant and retail) due to the location and proximity to US 40.

Internal Trip and Multipurpose Trip Reductions (applied after the multi-modal trips were reduced)

- Commercial uses in the Village Center area were given a 20% (office) to 25% (retail) reduction for multi-purpose trips (more than one destination in the Village Center on a single trip) and internal trips (trips between the residential and commercial uses that never leave the boundary of the project).
- Commercial uses in the smaller Neighborhood Centers were also given a 20% to 25% trip reduction for internal and multi-purpose trips.
- Industrial/Service uses were given a lower reduction of 10% in this category.
- All residential units were given a 22% trip reduction for multi-purpose and internal trips. This reduction factor represents the intent of the WSSAP to create land uses that result in many of the trips being local and not accessing the US 40 corridor. This trip reduction factor was calibrated such that the total residential internal trips reduced in the development balanced with the internal trips reduced at the commercial sites in the development. This balancing was necessary because in effect, the trip ends reduced at the commercial properties are the other end of the same internal trips generated at the residential properties.

Pass-by Trip Reductions

- A 25% pass-by trip factor was applied to only the commercial uses in the Village Center area along US 40. This reduction accounts for the traffic that is already driving by on US 40, but would divert into and out of the site to access the new commercial development. These trips are new to the site access roadways but are not new to the traffic on US 40. This reduction factor is consistent with ITE guidance, and also reflects the fact that many of the trips bypassing the site today are doing so to access commercial sites in Steamboat Springs.
- A 5% pass-by trip reduction was applied to the hotel use in the Village Center.

Land Use Plan **With** Large Format Retail

The trip generation analysis was redone for the alternative land use plan with large format retail at the Village Center along US 40. This alternative, as expected, resulted in a higher trip generation (detailed in Table 2). Using unadjusted ITE trip rates for individual uses yields approximately 36,100 vehicle trips per day. When we apply appropriate trip reduction factors to the site, as described above (except as noted below), it is projected that Steamboat 700 will generate approximately 21,900 new off-site vehicle trips per day.

The same trip reduction factors detailed above were used for this land use alternative except:

- The multi-modal trip reduction for the large format retail was reduced to 5% to reflect the higher tendency to drive to these uses of this type.
- The internal trip/multi-trip reduction factor was reduced to 20% for the large format retail uses.
- The residential internal trip factor was increased to 25% due to the increase in retail space and to help balance the residential/non-residential internal trip ends.

Community-wide Measures to Help Achieve Alternative Mode Goals

The land use density, use mix, proximity, scale, and character of the Steamboat 700 project, coupled with on-site trails, sidewalks, transit stops and transit service frequency will help ensure that the multi-modal trips will occur on-site. However, the longer multi-modal trips that connect to other parts of the community will require system wide support from the community. Some of the factors that have been identified in previous transportation plans and should continue to be part of the larger community-wide discussion, not only to support multi-modal trip making in the West Steamboat area, but throughout the community include:

- Parking management (fees, time limits, parking maximums instead of minimums, etc.) in the Downtown and Mountain areas to make driving less appealing and transit more attractive.
- Improved transit stop access (sidewalks, etc.) and amenities at the stops (more shelters, better waiting areas, better snow removal, etc.)
- Transit priority lanes (queue jump lanes) at congested signalized intersections if vehicles and buses are delayed more than one signal cycle (queue failure).
- On-street bike lanes to support bicycle travel and encourage commuting by bicycle.
- Continued extension of the Core Trail to link with existing and planned development in the West Steamboat area.
- Continued enhancement of the pedestrian environment in the Downtown and Mountain areas.
- Continued implementation of the Sidewalk Master Plan.

5.0 Trip Distribution

Directional trip distribution estimates were developed (and reviewed with staff) to project where the traffic accessing the Steamboat 700 site will be destined to or from. Figure 3 includes the primary directional distribution factors developed for this project. It is anticipated that 15% of the traffic that accesses this site will be destined to/from the west. This is consistent with existing traffic counts at residential driveways and accesses along US 40 currently. We believe this estimate may be conservatively low given the residential development, schools, other towns, and the regional airport that are west of this site.

The Slate Creek Connector is projected to serve 5% of the traffic accessing the site to/from the north, although this estimate may also be conservatively low given the WSSAP's desire to provide this connection between US 40 and CR 129.

Finally, the balance of traffic accessing the site (80%) is anticipated to be to/from the existing Steamboat Springs area. A significant portion of this traffic (25% at least) may be accessing the west Steamboat commercial area known as the "Curve", although some will access the Downtown or the Mountain areas.

Figure 4 includes a more detailed estimate of trip distribution pattern given the roadway connections that will serve the site. We have initially projected that 30% of the external site traffic will utilize the New Victory Parkway, although this percentage may increase depending on traffic conditions in the US 40 corridor between the site and the Elk River Road intersection.

It is anticipated that the trip distribution percentages will be similar between the Land Use Plan and the Large Format Retail Alternative.

6.0 Daily Traffic Assignment

As noted above, this Annexation Transportation Study has focused on the daily traffic that will exit the Steamboat 700 site and add to the traffic on area roadways. The 17,600 daily “external” or “off-site” trips generated by the buildout of Steamboat 700 Land Use Plan without large format retail, and the 21,900 daily trips generated by the Large Format Retail Alternative were assigned to the area roadways using the trip distribution estimates described in the previous section. Figure 5 illustrates these “new” off-site trips. It is projected that the increased demand in the US 40 corridor east of the site will range between 8,900 and 10,900 trips vehicle trips per day depending on the land use alternative selected.

The New Victory Parkway and the Slate Creek Connector will be able to easily accommodate the new traffic generated by Steamboat 700. US 40 west of this site will also be able to accommodate the projected traffic increase for some time given that a recent traffic count documented 10,000 vehicles per day near Steamboat II and the roadway has the capacity of 15,000 to 20,000 vehicles per day. The challenge for the Steamboat Springs community is accommodating traffic increases in the US 40 corridor east of the site, and this issue is currently being studied in detail as part of the US 40 NEPA Study.

It is anticipated that these external traffic projections generated by the Steamboat 700 site will be useful input information for the NEPA Study.

7.0 Preliminary Cost Sharing Model for Steamboat 700’s Off-site Impacts in the US 40 Corridor

The limited traffic capacity in the US 40 corridor west of the downtown has been an issue of growing concern in the community for many years. The original WSSAP acknowledged this issue and the Steamboat Springs Mobility and Circulation Plan (TransPlan, 1998) evaluated numerous alternatives for adding roadway capacity. The Steamboat Springs Area Community Plan (FHU, 2004) revisited this issue, but still no capacity additions were implemented. Recent traffic counts west of the downtown area have documented the continued growth in traffic in the US 40 corridor. The recent West Steamboat Springs US Highway 40 System Needs Study (Stolfus, 2008) was completed to take an initial look at projected traffic and system needs, but it was determined that a more detailed study consistent with NEPA requirements was needed. As noted above, the US 40 NEPA study has recently been commissioned to project the long term traffic growth and develop a set of multi-modal improvement recommendations, cost

estimates, and design plans to mitigate traffic growth and add traffic capacity in the corridor.

In this context, the NEPA study will become the definitive source of future travel demand and recommended system improvements. Unfortunately, this study will not be complete in time to support the Steamboat 700 annexation application and some of the annexation agreements that will need to be developed related to Steamboat 700 funding contribution to off-site transportation improvements in the US 40 corridor west of 13th Street.

As a result, this Annexation Transportation Study has developed a draft cost sharing model to help define the approach that will be taken to determine Steamboat 700's share of off-site transportation capacity enhancements in the US 40 corridor west of Downtown. While it is understood that most traffic projection input, as well as all improvement recommendations and costs will be updated once the NEPA study is complete, this draft cost sharing approach is intended to support the development of the necessary annexation agreement in the interim.

The cost sharing approach is fairly simple and includes the steps listed below. Table 3 includes a draft of this methodology for both land use scenarios:

1. Define roadway corridor segments or intersections in the US 40 corridor where distinct improvement recommendations are likely. For this step refer to Figure 6 which has identified off-site improvement locations A through I. Note that no specific improvements or cost estimates have been identified pending the completion of the NEPA study.
2. Document the existing traffic volume at each location A through I. This portion of the model has been filled in using recent traffic counts.
3. Define the existing traffic capacity at each roadway segment in the corridor (see assumptions on Table 3).
4. Project Year 2030 daily traffic volumes at each location (including traffic from Steamboat 700 and other developments in the West Steamboat area, and background growth over time). This portion of the model has been completed using projections from the Stolfus study as a placeholder.
5. Calculate the future growth in traffic demand at each location by subtracting the existing traffic (or the existing capacity if the segment is over capacity currently) from the projected traffic at each location.

6. Define the traffic that Steamboat 700 is projected to add at each location (from Figure 5).
7. Calculate the percentage of traffic growth at each location attributable to the Steamboat 700 development.

Note that steps 1-7 should help define the Steamboat 700 percentage cost share of off-site improvements for incorporation into necessary annexation agreements.

8. Enter the cost of the capacity improvements recommended by the NEPA study at each location.
9. Calculate Steamboat 700's cost share.

The resultant Steamboat 700 cost share percentages for each location in the corridor are illustrated on Table 3 (again, understanding that some of the numbers will be updated when the NEPA study is complete). As it stands, this draft model can be used as a starting point for the development of an annexation agreement related to off-site improvement cost sharing.

8.0 Conclusion

Steamboat 700 is proposing the development of 2,044 dwelling units and 340,000 sq. ft. of non-residential floor area, consistent with the guidelines contained in the WSSAP. The proposed development mix, density, location, and character, coupled with the proposed multi-modal transportation network should minimize the off-site automobile traffic that is added to the US 40 corridor.

A second development alternative has explored the addition of large format retail use in the Village Center near the US 40 site entrance. This alternative includes 1,818 dwelling units and 539,000 sq. ft. of non-residential floor area.

This preliminary traffic study has projected the amount of traffic that will access the site, estimated the directional traffic distribution patterns, and estimated the amount of additional traffic that would be added to surrounding roadways in the West Steamboat area. A draft methodology for determining the Steamboat 700 share of the cost of off-site capacity improvements in the US 40 corridor west of the downtown area has also been developed.

Significant findings, observations, and conclusions are listed below:

- It is projected that approximately 17,600 vehicle trips per day will access the site to/from the surrounding roadway system based on the land use plan **without** large format retail uses.
- It is projected that approximately 21,900 vehicle trips per day will access the site to/from the surrounding roadway system based on the land use plan **with** large format retail uses.
- 80% of the off-site traffic will likely be oriented to and from Steamboat Springs to the east.
- At least 25% of the traffic that does head east toward Steamboat will be destined for the “Curve” area and will not contribute to traffic congestion farther east.
- It has been estimated that 5% of the off-site trips from Steamboat 700, at buildout, will utilize bus transit. Achieving this transit goal will require off-site actions and improvements within the community.
- Traffic congestion and capacity limitations in the US 40 corridor west of the Downtown area have been a source of concern for many years.
- The US 40 NEPA Study has recently been commissioned to project future traffic in the corridor and identify needed transportation system improvements west of 13th Street.
- Traffic is likely to grow in the US 40 corridor with or without Steamboat 700. Traffic growth may actually be minimized in the corridor with the development of the Steamboat 700 project since it offers the opportunity to implement the goals of the WSSAP which will help minimize automobile traffic for a given level of residential development.
- This Annexation Transportation Study will be expanded in the future to provide more detail related to specific intersection operations, traffic control, recommended laneage, etc. in association with development phases. Future studies will incorporate the findings and projections of the US 40 NEPA Study.



Table 1. Trip Generation Estimate - *WITHOUT* Large Format Retail

POD	ITE Code	Land Use	Size	Unit	Trip Reduction Factors			Average Daily Trips			External A.M. Peak Hour Trips				External P.M. Peak Hour Trips			
					Multi-Modal	Internal Trips and Multi-Purpose Trips	Pass-By	Rate	Total Trips with No Trip Reductions	Total External Trips With Trip Reductions	Rate	Total	In	Out	Rate	Total	In	Out
1	210	Single Family Detached	19	Dwelling Units	0.15	0.22	0.00	9.57	182	121	0.75	9	2	7	1.01	13	8	5
2	210	Single Family Detached	112	Dwelling Units	0.15	0.22	0.00	9.57	1072	711	0.75	56	14	42	1.01	75	47	28
2	230	Townhome / Condo	31	Dwelling Units	0.15	0.22	0.00	5.86	182	120	0.44	9	1	8	0.52	11	7	4
3	230	Townhome / Condo / Apt	323	Dwelling Units	0.15	0.22	0.00	5.86	1893	1255	0.44	94	15	79	0.52	111	74	37
3	710	Office	45	1,000 SF	0.10	0.20	0.00	11.01	495	357	1.55	50	44	6	1.49	48	8	40
3	310	Hotel	80	Rooms	0.05	0.05	0.05	8.17	654	557	0.56	38	23	15	0.59	40	21	19
3	931	Quality Restaurant	0	1,000 SF	0.10	0.25	0.25	89.95	0	0	0.81	0	0	0	7.49	0	0	0
3	814	Specialty Retail	46	1,000 SF	0.10	0.25	0.25	44.32	2039	1032	1.03	24	15	9	2.71	63	28	35
3	862	Home Improvement Store	0	1,000 SF	0.05	0.20	0.25	29.80	0	0	1.20	0	0	0	2.45	0	0	0
3	850	Supermarket	54	1,000 SF	0.05	0.25	0.25	102.24	5521	2950	3.25	94	48	46	10.45	302	184	118
3	815	Discount Store	0	1,000 SF	0.05	0.20	0.25	56.02	0	0	0.84	0	0	0	5.06	0	0	0
4	230	Townhome / Condo	139	Dwelling Units	0.15	0.22	0.00	5.86	815	540	0.44	41	7	34	0.52	48	32	16
4	210	Single Family Detached	69	Dwelling Units	0.15	0.22	0.00	9.57	660	438	0.75	34	9	25	1.01	46	29	17
5	230	Townhome / Condo	134	Dwelling Units	0.15	0.22	0.00	5.86	785	521	0.44	39	6	33	0.52	46	31	15
5	210	Single Family Detached	14	Dwelling Units	0.15	0.22	0.00	9.57	134	89	0.75	7	2	5	1.01	9	6	3
6	210	Single Family Detached	5	Dwelling Units	0.15	0.22	0.00	9.57	48	32	0.75	2	1	1	1.01	3	2	1
7	230	Townhome / Condo	75	Dwelling Units	0.15	0.22	0.00	5.86	440	291	0.44	22	4	18	0.52	26	17	9
7	210	Single Family Detached	124	Dwelling Units	0.15	0.22	0.00	9.57	1187	787	0.75	62	16	46	1.01	83	52	31
8	230	Townhome / Condo	75	Dwelling Units	0.15	0.22	0.00	5.86	440	291	0.44	22	4	18	0.52	26	17	9
8	210	Single Family Detached	64	Dwelling Units	0.15	0.22	0.00	9.57	612	406	0.75	32	8	24	1.01	43	27	16
9	230	Townhome / Condo	541	Dwelling Units	0.15	0.22	0.00	5.86	3170	2102	0.44	158	25	133	0.52	187	125	62
9	814	Specialty Retail	60	1,000 SF	0.15	0.25	0.00	44.32	2659	1695	1.03	39	24	15	2.71	104	46	58
9	931	Quality Restaurant	10	1,000 SF	0.15	0.25	0.00	89.95	900	573	0.81	5	3	2	7.49	48	32	16
9	710	Office	50	1,000 SF	0.10	0.20	0.00	11.01	551	396	1.55	56	49	7	1.49	54	9	45
10	230	Townhome / Condo	48	Dwelling Units	0.15	0.22	0.00	5.86	281	186	0.44	14	2	12	0.52	17	11	6
10	210	Single Family Detached	132	Dwelling Units	0.15	0.22	0.00	9.57	1263	838	0.75	66	17	49	1.01	88	55	33
10	110	Industrial / Service	20	1,000 SF	0.05	0.10	0.00	6.97	139	119	0.92	16	14	2	0.98	17	2	15
11	230	Townhome / Condo	40	Dwelling Units	0.15	0.22	0.00	5.86	234	155	0.44	12	2	10	0.52	14	9	5
11	210	Single Family Detached	99	Dwelling Units	0.15	0.22	0.00	9.57	947	628	0.75	49	12	37	1.01	66	42	24
11	492	Health Club	15	1,000 SF	0.15	0.10	0.00	32.93	494	378	1.21	14	6	8	4.05	46	23	23
Subtotal - Western Area:									27,797	17,568		1,064	373	691		1,634	944	690

2,044 Dwelling Units 14,345
 340 1,000 sq. ft. Non-Residential Floor Area (includes 40 ksf Hotel) 12,798
 80 Hotel Rooms 654



Table 2. Trip Generation Estimate - WITH Large Format Retail

POD	ITE Code	Land Use	Size	Unit	Trip Reduction Factors			Average Daily Trips			External A.M. Peak Hour Trips				External P.M. Peak Hour Trips			
					Multi-Modal	Internal Trips and Multi-Purpose Trips	Pass-By	Rate	Total Trips with No Trip Reductions	Total External Trips With Trip Reductions	Rate	Total	In	Out	Rate	Total	In	Out
1	210	Single Family Detached	19	Dwelling Units	0.15	0.25	0.00	9.57	182	116	0.75	9	2	7	1.01	12	8	4
2	210	Single Family Detached	112	Dwelling Units	0.15	0.25	0.00	9.57	1072	683	0.75	54	14	40	1.01	72	45	27
2	230	Townhome / Condo	31	Dwelling Units	0.15	0.25	0.00	5.86	182	116	0.44	9	1	8	0.52	10	7	3
3	230	Townhome / Condo / Apt	97	Dwelling Units	0.15	0.25	0.00	5.86	568	362	0.44	27	4	23	0.52	32	21	11
3	710	Office	17	1,000 SF	0.10	0.20	0.00	11.01	187	135	1.55	19	17	2	1.49	18	3	15
3	310	Hotel	80	Rooms	0.05	0.05	0.05	8.17	654	557	0.56	38	23	15	0.59	40	21	19
3	931	Quality Restaurant	5	1,000 SF	0.10	0.25	0.25	89.95	450	228	0.81	2	1	1	7.49	19	13	6
3	814	Specialty Retail	16	1,000 SF	0.10	0.25	0.25	44.32	709	359	1.03	8	5	3	2.71	22	10	12
3	862	Home Improvement Store	133	1,000 SF	0.05	0.20	0.25	29.80	3963	2259	1.20	91	49	42	2.45	186	87	99
3	850	Supermarket	54	1,000 SF	0.05	0.25	0.25	102.24	5521	2950	3.25	94	48	46	10.45	302	184	118
3	815	Discount Store	124	1,000 SF	0.05	0.20	0.25	56.02	6946	3959	0.84	59	0	59	5.06	358	0	358
4	230	Townhome / Condo	139	Dwelling Units	0.15	0.25	0.00	5.86	815	519	0.44	39	6	33	0.52	46	31	15
4	210	Single Family Detached	69	Dwelling Units	0.15	0.25	0.00	9.57	660	421	0.75	33	8	25	1.01	44	28	16
5	230	Townhome / Condo	134	Dwelling Units	0.15	0.25	0.00	5.86	785	501	0.44	38	6	32	0.52	44	29	15
5	210	Single Family Detached	14	Dwelling Units	0.15	0.25	0.00	9.57	134	85	0.75	7	2	5	1.01	9	6	3
6	210	Single Family Detached	5	Dwelling Units	0.15	0.25	0.00	9.57	48	31	0.75	2	1	1	1.01	3	2	1
7	230	Townhome / Condo	75	Dwelling Units	0.15	0.25	0.00	5.86	440	280	0.44	21	3	18	0.52	25	17	8
7	210	Single Family Detached	124	Dwelling Units	0.15	0.25	0.00	9.57	1187	757	0.75	59	15	44	1.01	80	50	30
8	230	Townhome / Condo	75	Dwelling Units	0.15	0.25	0.00	5.86	440	280	0.44	21	3	18	0.52	25	17	8
8	210	Single Family Detached	64	Dwelling Units	0.15	0.25	0.00	9.57	612	390	0.75	31	8	23	1.01	41	26	15
9	230	Townhome / Condo	541	Dwelling Units	0.15	0.25	0.00	5.86	3170	2021	0.44	152	24	128	0.52	179	120	59
9	814	Specialty Retail	60	1,000 SF	0.15	0.25	0.00	44.32	2659	1695	1.03	39	24	15	2.71	104	46	58
9	931	Quality Restaurant	10	1,000 SF	0.15	0.25	0.00	89.95	900	573	0.81	5	3	2	7.49	48	32	16
9	710	Office	45	1,000 SF	0.10	0.20	0.00	11.01	495	357	1.55	50	44	6	1.49	48	8	40
10	230	Townhome / Condo	48	Dwelling Units	0.15	0.25	0.00	5.86	281	179	0.44	13	2	11	0.52	16	11	5
10	210	Single Family Detached	132	Dwelling Units	0.15	0.25	0.00	9.57	1263	805	0.75	63	16	47	1.01	85	54	31
10	110	Industrial / Service	20	1,000 SF	0.05	0.10	0.00	6.97	139	119	0.92	16	14	2	0.98	17	2	15
11	230	Townhome / Condo	40	Dwelling Units	0.15	0.25	0.00	5.86	234	149	0.44	11	2	9	0.52	13	9	4
11	210	Single Family Detached	99	Dwelling Units	0.15	0.25	0.00	9.57	947	604	0.75	47	12	35	1.01	64	40	24
11	492	Health Club	15	1,000 SF	0.15	0.10	0.00	32.93	494	378	1.21	14	6	8	4.05	46	23	23
Subtotal - Western Area:									36,137	21,868		1,071	363	708		2,008	950	1,058

1,818 Dwelling Units
 539 1,000 sq. ft. Non-Residential Floor Area (includes 40 ksf Hotel)
 80 Hotel Rooms

13,020
 22,463
 654

Table 3
Steamboat 700
Potential US 40 Corridor Capacity Improvement Cost Sharing Methodology

(See Also Attached Figure 6)



Land Use Plan - WITHOUT Large Format Retail

Project Number	Project Description	1. 2008 Daily Traffic (vpd)	2. Existing Daily Capacity (vpd)	3. Projected Year 2030 Daily Traffic (vpd)	4. Projected Traffic Growth - above 2008 traffic or "daily capacity" (vpd) (3 - (2 or 1))	5. Steamboat 700 Daily Traffic (included in Year 2030 Traffic) (vpd)	6. Steamboat 700 Percent Contribution to Daily Traffic Increase (%) (5 / 4)	7. Cost of Infrastructure Improvement	8. Steamboat 700 Cost Share (6 X 7)
A	US 40 Improvements - 13th St. to CR 129	24,900	20,000	61,000	41,000	10,700	26%	TBD	TBD
B	Intersection Improvements - US 40 / CR 129	20,700	--	64,000	43,300	13,200	30%	TBD	TBD
C	US 40 Improvements - CR 129 to Downhill Drive	14,900	20,000	42,000	27,100	8,900	33%	TBD	TBD
D	Intersection Improvements - US 40 / Downhill Drive	15,600	--	47,000	31,400	8,900	28%	TBD	TBD
E	US 40 Improvements - Downhill Dr. to Steamboat West Blvd.	11,000	20,000	31,000	20,000	8,900	45%	TBD	TBD
F	CR 129 Improvements - US 40 to New Victory Parkway	5,700	15,000	17,000	11,300	5,300	47%	TBD	TBD
G	US 40 Improvements - Steamboat West Blvd. to CR 42	11,000	20,000	23,000	12,000	3,500	29%	TBD	TBD
H	US 40 Improvements - CR 42 to Brandon Cir.	9,800	20,000	22,000	12,200	2,500	20%	TBD	TBD
I	Slate Creek Connector - S700 Boundary to CR 129	--	15,000	5,000	5,000	900	18%	TBD	TBD
Total:								\$0	\$0

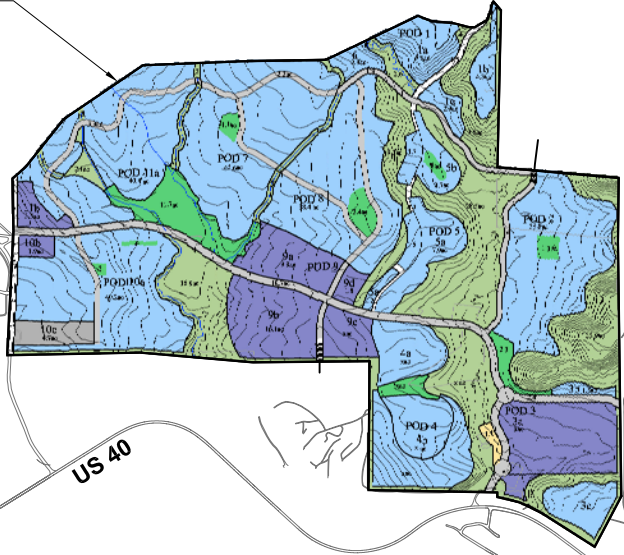
Land Use Plan - WITH Large Format Retail

Project Number	Project Description	1. 2008 Daily Traffic (vpd)	2. Existing Daily Capacity (vpd)	3. Projected Year 2030 Daily Traffic (vpd)	4. Projected Traffic Growth - above 2008 traffic or "daily capacity" (vpd) (3 - (2 or 1))	5. Steamboat 700 Daily Traffic (included in Year 2030 Traffic) (vpd)	6. Steamboat 700 Percent Contribution to Daily Traffic Increase (%) (5 / 4)	7. Cost of Infrastructure Improvement	8. Steamboat 700 Cost Share (6 X 7)
A	US 40 Improvements - 13th St. to CR 129	24,900	20,000	63,000	43,000	13,000	30%	TBD	TBD
B	Intersection Improvements - US 40 / CR 129	20,700	--	66,000	45,300	15,500	34%	TBD	TBD
C	US 40 Improvements - CR 129 to Downhill Drive	14,900	20,000	44,000	29,100	10,900	37%	TBD	TBD
D	Intersection Improvements - US 40 / Downhill Drive	15,600	--	49,000	33,400	10,900	33%	TBD	TBD
E	US 40 Improvements - Downhill Dr. to Steamboat West Blvd.	11,000	20,000	33,000	22,000	10,900	50%	TBD	TBD
F	CR 129 Improvements - US 40 to New Victory Parkway	5,700	15,000	17,000	11,300	6,600	58%	TBD	TBD
G	US 40 Improvements - Steamboat West Blvd. to CR 42	11,000	20,000	23,000	12,000	4,400	37%	TBD	TBD
H	US 40 Improvements - CR 42 to Brandon Cir.	9,800	20,000	22,000	12,200	3,000	25%	TBD	TBD
I	Slate Creek Connector - S700 Boundary to CR 129	--	15,000	5,000	5,000	1,100	22%	TBD	TBD
Total:								\$0	\$0

Notes (refer to numbered column):

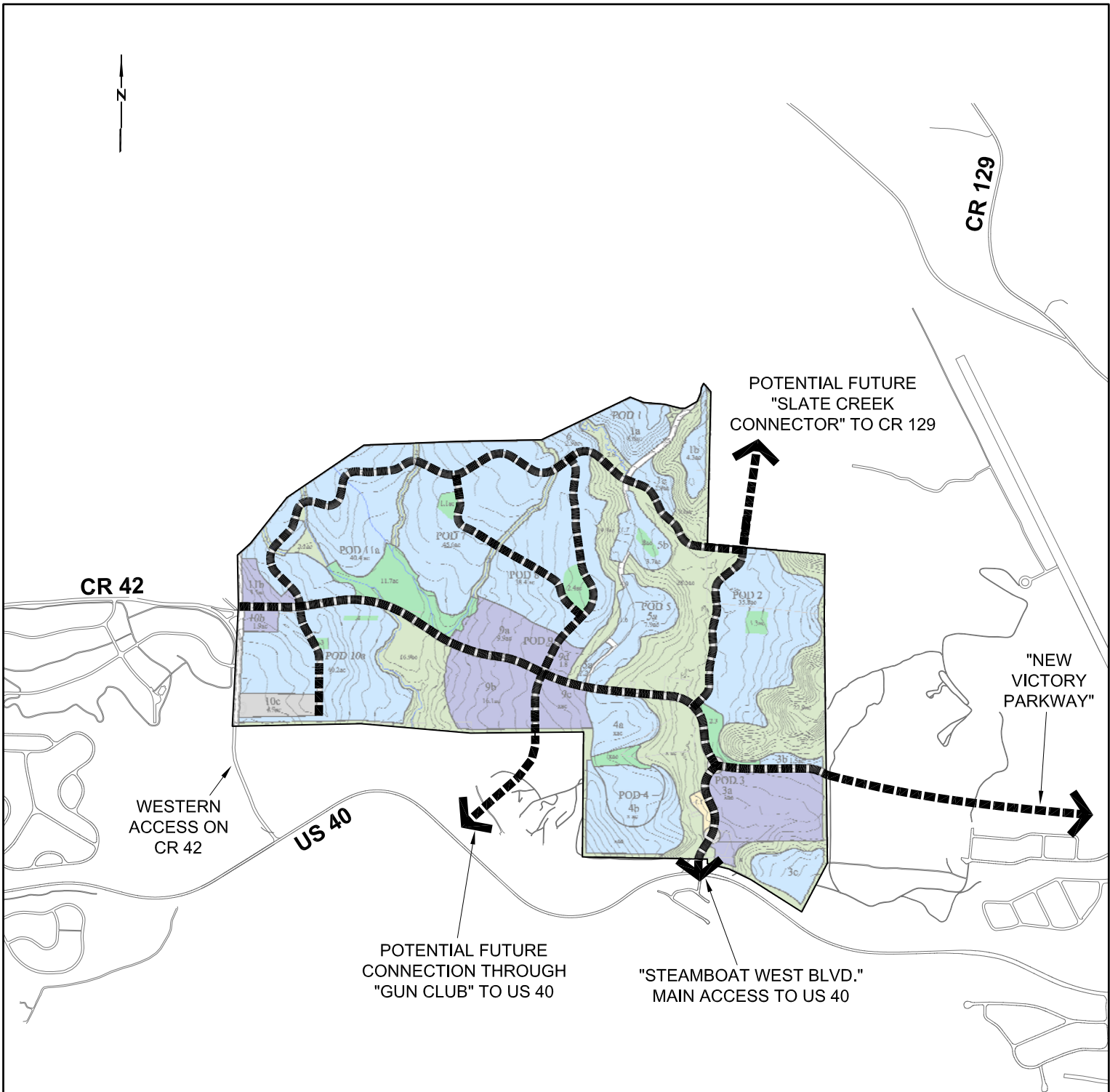
- Existing traffic volumes from recent counts or estimated based on recent intersection traffic counts. It is assumed that existing PM peak hour traffic represents 10% of daily traffic.
- Existing daily traffic capacity on US 40 estimated at 20,000 vpd where turn lanes available. Daily capacity on other 2-lane roadway estimated at 15,000 vpd.
- Year 2030 traffic projections based on information in the US Highway 40 System Needs Study (Stolfus). It is assumed that the PM peak hour in 2030 represents 8% of daily traffic. Traffic volumes on US 40 increased by 2,000 vpd for Large Format Retail Alternative to account for higher site generated traffic at S700.
- Traffic increases calculated relative to existing traffic except where existing traffic is over capacity. In this case traffic increase calculated relative to roadway segment capacity.
- Volumes from Steamboat 700 as projected in this Annexation Transportation Study.
- Roadway improvements and their costs to be determined based on the US 40 "NEPA" Study.

STEAMBOAT 700 PROJECT



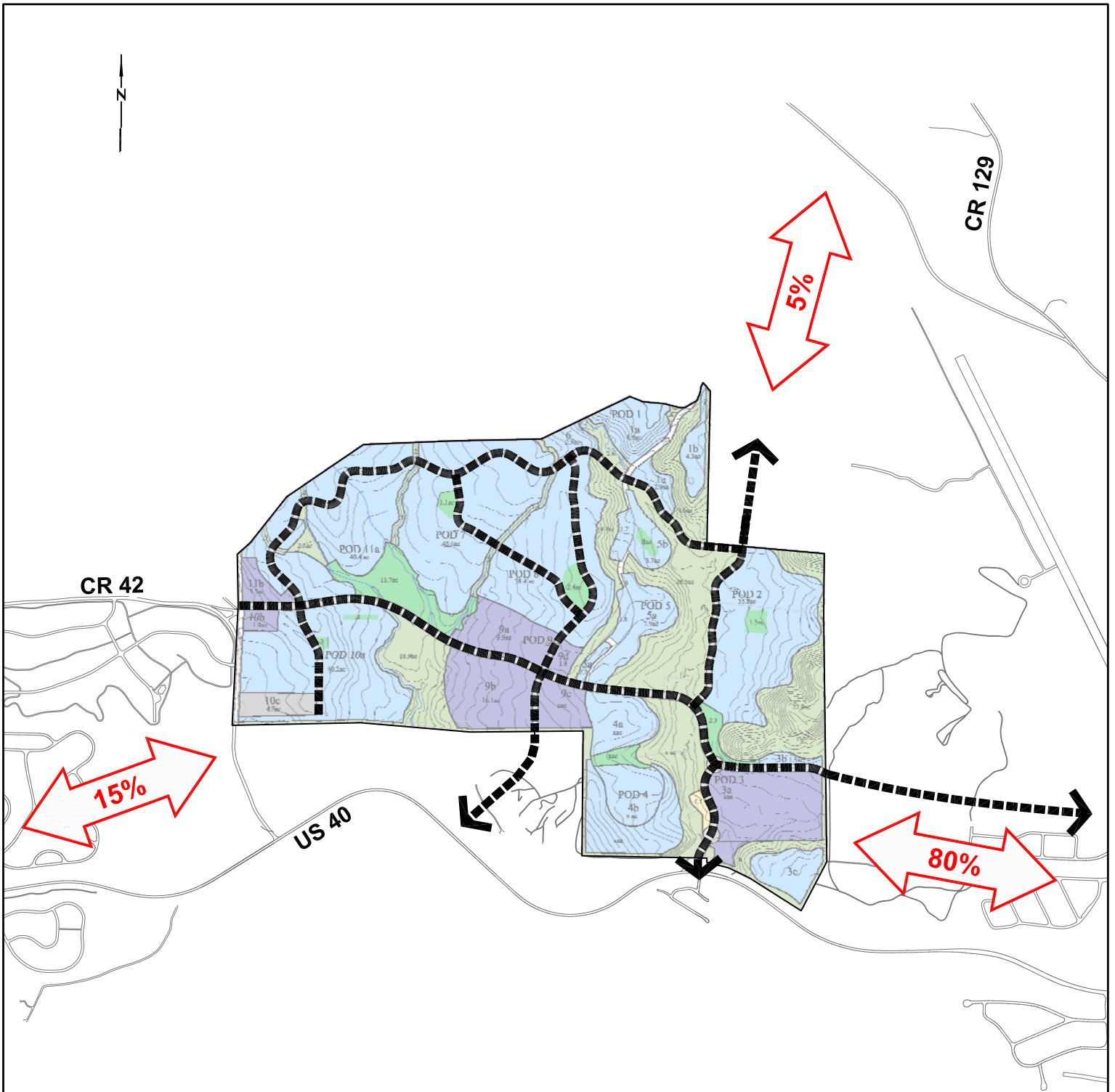
STEAMBOAT 700 ANNEXATION TRANSPORTATION STUDY
VICINITY MAP

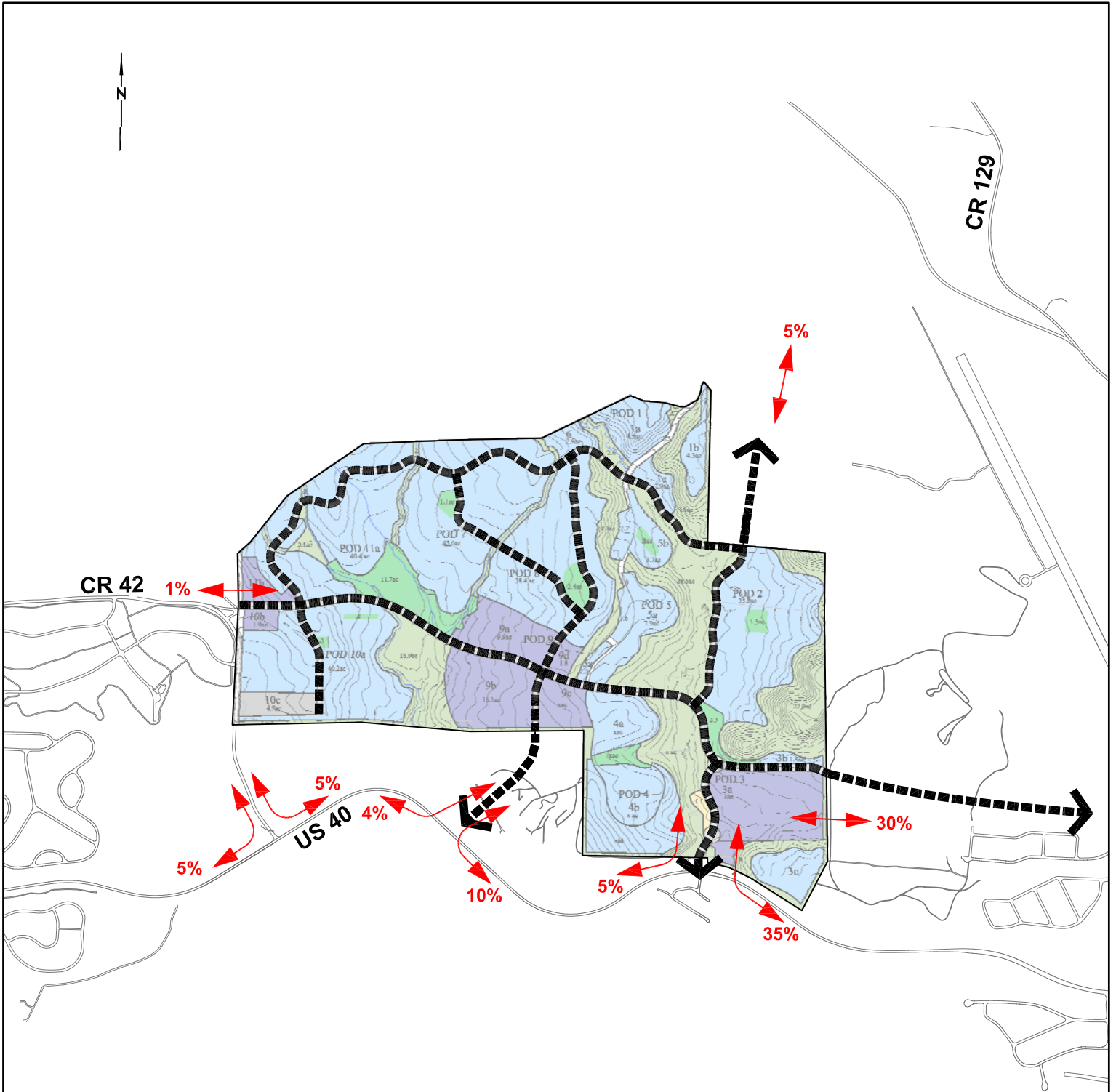
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STEAMBOAT 700 ANNEXATION TRANSPORTATION STUDY
SITE ACCESS

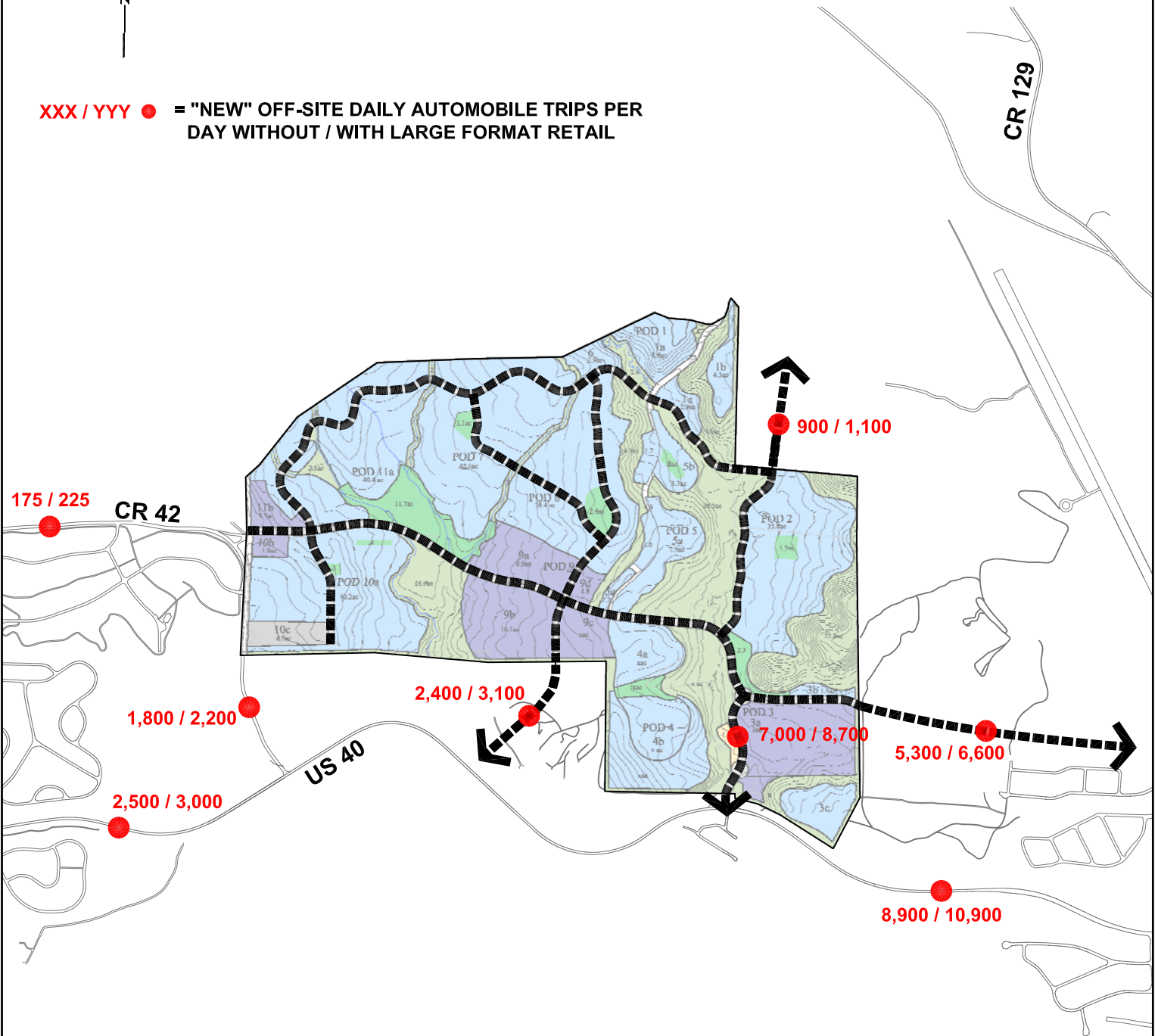
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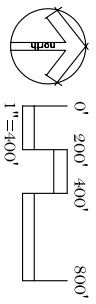
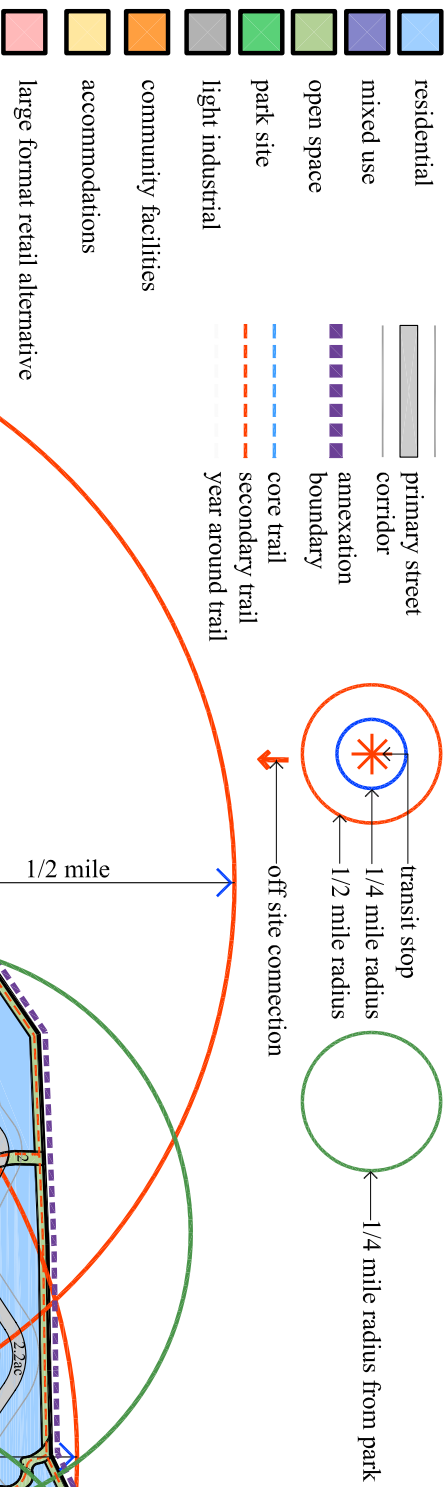


XXX / YYY ● = "NEW" OFF-SITE DAILY AUTOMOBILE TRIPS PER DAY WITHOUT / WITH LARGE FORMAT RETAIL



STEAMBOAT 700 ANNEXATION TRANSPORTATION STUDY
"NEW" DAILY TRIP ASSIGNMENT TO OFF-SITE ROADWAYS

LEGEND



STATISTICS

- Dwelling Units within 1/4 mile of three transit stops
The Land Use Plan has 2,044 total units - (72%) are within 1/4 mile of transit stop
Large Format Retail Alternative has 1,818 total units - (69%) are within 1/4 mile of transit stop
- Dwelling Units within 1/2 mile of three transit stops
The Land Use Plan has 2,044 total units - (100%) are within 1/2 mile of transit stop
Large Format Retail Alternative has 1,818 total units - (100%) are within 1/2 mile of transit stop
- Dwelling Units within 1/4 mile of neighborhood/community park
The Land Use Plan has 2,044 total units - (100%) are within 1/4 mile of park
Large Format Retail Alternative has 1,818 total units - (100%) are within 1/4 mile of park

