

## **Old Town Circulation Improvements**

August 15, 2019 Council Update

### **BACKGROUND**

Council has asked staff to conduct outreach, data collection, and general monitoring of safety and congestion concerns in Old Town. Staff is partway through a tiered approach (see **Exhibit B**) for implementing interim projects for 2019 and early 2020 to help some of the Old Town roadways perform better for all users. While some of this work has been community-driven, Staff is also taking a more strategic approach to interim changes with data collection to guide decisions.

Long term, Staff is tasked with conducting a robust study that results in an Old Town Access and Circulation plan implementable with a five year planning horizon to address traffic mitigation, pedestrian safety, access for Old Town residents, commercial vehicle access, rideshare considerations, enforcement opportunities, and parking program recommendations, among other things. An RFP is currently in circulation and a consultant will be selected within the month to work closely with Park City Staff on this effort. Recommendations and final design for the top three priority projects is expected in June 2020. Funding has been allocated for the study, and additional funding will be sought upon completion of the deliverable for project implementation.

### **NEED**

The historic district of town, largely built prior to automobiles, is seeing strain on its confined roadways trying to accommodate traffic during peak times like the ski season, and during large events. Residents in Old Town have expressed strong concerns over safety on roadways, lack of access in the case of an emergency due to crippling congestion at peak times, and a reported decrease in quality of life due to some of these impacts.

Staff understands the need to quantify the comments from the community in a robust and data-driven way, to ensure that holistic decisions are made using a defensible process that will not further impact the neighborhood. A significant amount of work has already been completed with data collection and on interim projects. The following two sections define this progress.

### **DATA COLLECTION**

*Traffic Data:*

A memo (**Exhibit E**), previously circulated to City Council in May of 2019, indicates that traffic counts, turning movements, and heavy vehicle turning movements have been collected on Hillside Avenue. Ongoing counts have been collected since November 27, 2018 and help inform some recommendations found in this report.

In summary, the memo indicates that heavier turning movements and traffic are seen in the westbound direction, particularly in evenings during peak winter periods (see page 3 of **Exhibit E** for a visual

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representation of traffic). Passenger vehicles heading down (westbound) Hillside are primarily accessing Main Street, however significant volumes are also accessing Daly and King Road, suggesting that over one third of traffic are locals accessing residential areas. Speeding does not seem to be a common issue on Hillside Avenue, partly due to narrow lane widths, directional yielding requirements, and a short corridor.

**Exhibit C** documents a traffic delay microsimulation conducted by Horrocks Engineers in May 2019. The microsimulation efforts required traffic counts be taken during peak PM hours at Hillside Ave and SR-244, Deer Valley Drive and SR-224, and Heber Ave and SR-224 intersections. To imitate winter and summer conditions (as counts were conducted in May) seasonal growth factors were added to inflate numbers to reflect some peak time behaviors seen (e.g. a significant backup of cars between the Marsac roundabout and Deer Valley Resort). The intent of the modeling was to determine future traffic delay in Old Town, and determine if adding a “No Left Turn” sign at the intersection of Hillside and SR-224 (Marsac Ave) could have added affects to this congestion. Simulation models conducted by Horrocks Engineers determined if shuttles traveling north on Marsac Avenue are prohibited from turning left during congested time, that their trip will be delayed an additional 9 minutes. The overall impact of a “no left onto Hillside” on the delay at the roundabout is insignificant. The memo indicated three scenarios:

- Scenario 1: Make no changes to signage or traffic flow
- Scenario 2: Add a “No Left Turn” sign at Marsac in reference to Hillside Ave
- Scenario 3: Add a “No Left Turn” and remove northbound “Stop” sign at Marsac and Hillside Ave

The microsimulation measured the Level of Service (LOS), a national measurement used to describe traffic operations at intersections based on congestion and delay, which ranks vehicle throughput performance from A (good) to E (failing). This effort, coupled with concierge shuttle schedules and vehicle data obtained from Deer Valley Resort, was used to determine the impacts to Hillside Ave and Old Town.

The microsimulation indicated that all three scenarios operated at an acceptable LOS C, or higher. Scenario 1 (making no changes) indicates much longer queue lengths and almost double the delay if traffic is already backed up significantly on Deer Valley Drive:

*If the queue length at Deer Valley Drive reaches 860 feet, a vehicle driving from Hillside Avenue to Heber Avenue would take approximately 4.81 minutes. However, at a queue length of 2,000 feet from Deer Valley Drive, a vehicle would take 8.87 minutes to reach Heber Avenue under the same circumstances.*

Simulations conducted determined that if shuttles traveling north on Marsac Avenue are prohibited from turning left during congested times, their trips will be delayed an additional almost 9 minutes. The overall impact of a “no left onto Hillside” on the delay at the roundabout is insignificant.

### *Crash Data:*

Park City Police Department pulled all reported crash data between 2007-2019 (see **Exhibit D**) in a

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variety of intersections and corridors in Old Town. Fifty (50) crashes have been reported, for an average of 4.1 incidents per year. Of all reported crashes, only one incident (that occurred on Deer Valley Drive) had an injury reported; likely due to the higher speeds on the corridor. The remaining crashes were considered fairly minor and include things like buses hitting car mirrors on constrained corridors, and minor fender benders. A deeper dive into the crash data can be done at Council request; as it requires Police to read each report individually to determine what happened.

### *Community Feedback:*

A flyer (**Exhibit J**) was distributed between August 2-4, 2019 to Old Town residents, HPCA, Lodging Association, For-Hire lists, and others, indicating some of the changes Staff has made, the near-term plans, and a request for feedback and/or to attend the August 15, 2019 City Council meeting. Comments have been recorded and tracked and are included in **Exhibit N** for the public record.

A Community Q & A session (notes from which can be found in **Exhibit M**) was held on Wednesday August 7, 2019. Approximately 25 Old Town residents and stakeholders including HPCA representatives, City Council liaisons, and for-hire representatives attended. An overview of current projects, proposed projects, and projects Staff are not recommending be implemented were reviewed. A constructive dialogue was conducted, and attendees were able to share their experiences with traffic and safety in the area, and provide suggestions for mitigation.

More generally, ongoing feedback from the community has indicated to Staff that intense impacts exist on residential streets in Old Town during peak times. Including but not limited to Park Avenue, Norfolk Ave, and Hillside Ave. Concerns over safety, access for EMS vehicles, and intense congestion have been documented. Many residents indicate these impacts are elevated substantially during the Sundance Film Festival and have requested City Staff to implement more aggressive strategies for mitigation.

## WORK DONE TO DATE

**Exhibit B** comprehensively summarizes Staff's efforts in mitigating some of these neighborhood concerns. Treatments (some permanent and some temporary) have been installed to help with traffic calming on and near Hillside Ave. In addition to that, wayfinding, intersection treatments, and other signage have been implemented at key entry points to Old Town and within Old Town to help facilitate traffic flow, particularly for visitors unfamiliar with the area.

## PROJECTS IN PROGRESS

This season, summer 2019, Staff has contracted with Horrocks Engineers to design and implement several Old Town projects that will help improve pedestrian safety and access, calm traffic, and positively influence the flow of traffic in the area. These projects were carefully selected as being fiscally responsible, implementable in a constrained timeline, and will not negatively influence recommendations from the longer term Old Town Access and Circulation plan (launching in August 2019). See **Exhibit B** for more details on projects currently in progress.

- Curb cuts on 5<sup>th</sup> Street to match new directionality of traffic

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- Addition of pedestrian space on 4<sup>th</sup> Street (this season will use planters and paint to delineate the space, with the intent to pour concrete sidewalks next season) and new one way westbound directionality
- Artistic and safe pedestrian crossings with approved materials recommended by an engineer will be designed this year, with the intent to be implemented in various locations in Old Town in 2020
- The design and cost estimate for adding a pedestrian walkway between the retaining walls on Hillside Avenue will be created, to help delineate a safe space for pedestrians and remove any potential vehicle/pedestrian conflicts
- A conceptual design with high-level cost estimate for widening of Hillside Ave to accommodate two-way traffic will be conducted to direct staff on potential future costs associated with changing the retaining wall and roadway prism of Hillside Ave
- Discussion with UDOT on the process/ability/timeline to implement wayfinding on SR-224 (Deer Valley Drive portion) – while signage was originally recommended to Council, this corridor is a UDOT road and requires encroachment permissions and design approval from them before proceeding
- Working in conjunction with Park City Business Licensing to create code addressing commercial vehicles (CV) classifications to include concierge vehicles
- Pick up and drop off shuttle & TNC zones on Main Street and Swede Alley with use of CV parking regulation, and training lodging

## RECOMMENDED PROJECTS

Staff has worked diligently to compile a list of potential future projects and policies (in addition to what's currently underway) for City Council to consider based on data collection, neighborhood observations, crash data, enforcement protocols, etc. Please see **Exhibit G** for a comprehensive list. The following projects are Staff recommendations from **Exhibit G**:

- **Pedestrian infrastructure on Hillside** – While crash data (**Exhibit D**) doesn't indicate an immediate conflict between pedestrians and vehicles (likely due to low speeds), the addition of a pedestrian walkway on Hillside Avenue between the retaining walls on the south/west side of the street can help alleviate strain on the roadway and provide a safe space for vulnerable users. Staff recommends seeking a conceptual design and cost estimate for constructing this facility.
- **Better wayfinding at Swede/Main, Main, Hillside and Daly** - Signage to direct visitors back down Swede Alley and Main Street instead of up Hillside, coupled with a temporary turnaround treatment will facilitate traffic flow to head back into the business district, rather than up through Hillside. Observations during events and recorded vehicle turning movements (**Exhibit B**) indicate much of the traffic seen on Hillside Ave is not commercial vehicles, but rather visitors unfamiliar with the area attempting to access Main Street, as well as residents and TNCs.
- **Signed curbside pick-up and drop-off zones** – Staff recommend, and plan to proceed with three locations on Main Street for shuttles, and potentially TNC's, to pick up and drop off clientele.

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This alleviates double parking issues, facilitates traffic through put on Main Street, provides convenience for concierge services, and helps change behavior of those who may call for a rideshare vehicle from Main Street. Locations were strategically chosen based on parking turnover trends, Main Street destinations, shuttle movements, and parking revenue streams. A recommendation from Parking will be required to determine if these zones can be used as 15 minute parking, or otherwise, during the day.

- **Voluntary Seasonal or Time frame Use Restrictions (Lodging)** – Per voluntary options offered by uphill Lodging companies, staff recommends subsequent discussion and agreement with lodging companies to implement reduce trips on Hillside Avenue until completion of the Old Town Access and Circulation Study,. The City Engineer has agreed to random, video observation and monitoring up to 2x/month once an agreed upon is established.

### ADDITIONAL ALTERNATIVES – STAFF SEEKS SPECIFIC DISCUSSION

- **Dynamic LED Sign for ‘NO LEFT TURN’ at Hillside Ave** – Staff recommend implementing “No Left Turn” from 12:00 am to 3:00 pm at Marsac to Hillside and “No Right Turn” from 3:00 pm to 12:00 am at Hillside to Marsac. These measures will discourage use of Hillside at peak times as it decreases the level of convenience for all vehicles trying to make certain movements. An LED sign (pending UDOT approval for the Marsac side) can allow for enforcement without the need to have posted times, and it can be used dynamically during peak events or other times deemed necessary. A restrictive dynamic LED sign like this is likely more effective than one with posted hours, as it is hard to enforce the latter. Traffic volumes from permanent counters on Hillside Ave (see **Exhibit B**) indicate that westbound peak volumes consistently spike around 6:00 pm on both weekdays and weekends. Eastbound traffic does not see the same intense peak activity, and volumes are generally higher from about 11:00 am to 9:00 pm. Overall traffic volumes are significantly lower in the eastbound direction than the westbound direction, which is why staff is recommending turning movement restrictions by time of day.

UDOT does allow for LED sign types periodically, but historically they have always been associated with a signal. They are currently looking at requirements for using this treatment at a non-signalized intersection and will continue to keep us informed.

### NOT RECOMMENDED

While included in **Exhibit G** for Council consideration, staff does not recommend the following options for the reasons included below:

- **One way eastbound or westbound on Hillside** – This one way restriction also puts an undue hardship on residents by inhibiting their ability to get in and out of their neighborhood. Also, emergency response and police vehicles may need to use Hillside against traffic, and that requires the use of lights/sirens - which could become the new norm for residents. While traffic volumes could suggest that a one way westbound restriction could help get traffic out of Old Town, particularly at peak times, this would be prohibitive to residents trying to get into Old Town to access their homes.

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- **One way restrictions by time of day on Hillside** - A restriction based on signed time of day would likely be difficult to prosecute, and could result in unlawful detainments if police attempt to enforce. A restriction will likely be more successful by using an LED sign, or general language such as, “after dusk”.
- **Signalize yield requirements on Hillside Ave** – This is not recommended as other approaches indicated above may be more impactful for traffic calming measures on Hillside Ave.
- **Curb cut at Bob Wells Plaza** – Originally deemed viable for shuttle staging and a pick-up and drop-off location, the zones being created on Main Street (listed above) are the preferred alternative for this effort.
- **Vehicle restrictions on Hillside Ave** – A variety of tactics were discussed for restricting vehicles based on type, weight, and vehicle registration outside of Summit County. Ultimately Staff does not recommend vehicle restrictions like these due to the difficulty in enforcing, the legality of some restrictions, and the turning movement data that suggests these measures would ultimately not provide the traffic mitigation solutions sought by some residents.
- **Classification of Hillside Ave** –

In the 1984 Street Master Plan, Hillside Avenue is classified as a “residential street,” which for new streets requires minimum requirements of 25 foot travel section, and 2.5 foot curb and gutter on each side. Thus the Street Master Plan would seem to suggest alternative 1. The standard is not mandatory for repair of existing streets and the Plan further provides:

“The cross-section diagram below is the standard to be used for the construction of all new residential roadways in Park City. In unique circumstances or in areas where alternative designs would result in a more appropriate solution, other optional cross-sections are permissible at the City’s discretion.”

- In the 2011 Traffic and Transportation Master Plan, Hillside Avenue was not classified as staff struggled with designating this dual purpose street. The two possible classifications considered were Commercial Collector and Minor Residential Collector. Staff recommends that Hillside Avenue remain unclassified. If action is taken, Staff’s preliminary recommendation would be to consider classifying the roadway as a Commercial Collector. As such and if one takes the lower capacity collector (Minor Residential), the daily traffic volume and threshold capacities are never exceeded. Hillside Avenue was built below standards for a collector (minimum of 10 foot wide travel lanes), however it meets minimum standards for required width (20’ pavement). From a physically constructed standpoint, Hillside Avenue more closely resembles a local road. Even so, the local road threshold is not exceeded during a normal non-peak day and the number of trips recorded is within the streets acceptable daily traffic volumes.

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### Street Classification                      Daily Traffic Volumes (Trips)

<i>Commercial Collector</i>	<i>7,000 – 15,000</i>
<i>Minor Residential Collector</i>	<i>2,000 – 5,000</i>
<i>Local Road – Old Town</i>	<i>Less than 2,000</i>

### Historic Counts:

Table 1: Past Traffic Counts from NTMP

<u>Time Period</u>	<u>ADT</u>
10/28/2008 – 10/31/2008	879
09/19/2014 – 10/29/2014	1,156
12/05/2014 – 12/09/2014	1,347
12/30/2014 – 01/08/2015	1,822
01/13/2017 – 01/20/2017	2,300*
07/03/2017 – 07/06/2017	2,988**
11/22/2017-11/27/2017	1,322***

\* Martin Luther King Weekend Holiday \*\* July 4<sup>th</sup> Weekend Holiday \*\*\* Thanksgiving weekend

### Current Counts:

Table 2: Continuous Traffic Counts (11/27/2018 through 8/1/2019)

<u>Traffic Analysis Report</u>			
<u>Dates</u>	11/27/2018 through 8/1/2019		
	<u>Westbound</u>	<u>Eastbound</u>	<u>Merged</u>
ADT (Vehicles Per Day)	929	763	1692
85th Percentile Speed (MPH)	22	23	23
Peak Week ADT (Vehicles Per Day)	1707	1676	3384
December ADT (Vehicles Per Day)	1039	816	1858
January ADT (Vehicles Per Day)	1372	1180	2554
February ADT (Vehicles Per Day)	1120	914	2035
March ADT (Vehicles Per Day)	1077	884	1961
April ADT (Vehicles Per Day)	615	508	1123
May ADT (Vehicles Per Day)	620	559	1178
June ADT (Vehicles Per Day)	849	822	1671
July ADT (Vehicles Per Day)	1001	983	1984
Peak Week	1/28/2019		
Peak Hours	5PM-6PM		
Peak Days	Friday, Saturday, Sunday		

## IS HILLSIDE FUNCTIONING AS INTENDED?

A review of the staff reports and minutes from the Council decision on Hillside (1/8/09 & 2/26/09) yield direction to build Hillside Avenue at 15.5' paved surface, a total hard surface of 20', plus an additional 3' unpaved buffer on the west side and 6" to 1' on the east side for a total width of approximately 23.5 feet. The minutes do reflect that Council unanimously answered "yes" to the policy questions in the staff report:

- (1) Does Council believe that a real or perceived narrow road will deter use of the road?;
- (2) Does Council believe that a narrower road will be safer because people will be more cautious?;
- (3) Does Council want to deter use of Hillside as another access to Main Street?

The 4<sup>th</sup> policy question in the report is omitted from the minutes (unintentionally?):

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(4) Does Council believe that the roundabout, Heber Ave, and 9<sup>th</sup> Street are sufficient access to Main St?

The minutes further note, “[A Council member] suggested installing signs denoting residential area only no commercial traffic. Matt Cassel explained that this was discussed with [a resident] at one of the open houses and the consultants have been directed to design signs to make it a local street and maybe place weight limits on the road. [Council Member] believed it will still be necessary to post no commercial traffic. After discussion, the majority consensus of Council members was to proceed with [the cross section described above] Alternative 2.”

The minutes reflect no additional discussion or consensus. The next discussions in 2014 reflect is that “yield” signs were installed.

Lastly, the 2/28/09 report includes the statement, “If Council selects Alternative 2, the Streets Master Plan should be amended and Hillside should be classified as a low volume street and road width reduced from 25 feet of hard surface to 20 feet of hard surface.”

Subsequently, the City Engineer in Dec 2014 Additional Analysis to the 2014 NTMP request notes:

*In the 2011 Traffic and Transportation Master Plan, Hillside Avenue was not classified as staff struggled with designating this dual purpose street. The two possible classifications considered were Commercial Collector and Minor Residential Collector. The design capacity of these two classifications is as follows (Local Road is added in the chart for further discussion);*

<b><u>Street Classification</u></b>	<b><u>Daily Traffic Volumes (Trips)</u></b>	<b><u>Threshold (Trips)</u></b>
<i>Commercial Collector</i>	<i>7,000 – 15,000</i>	<i>1</i>
<i>Minor Residential</i>	<i>2,000 – 5,000</i>	<i>8,</i>
<i>Local Road – Old Town</i>	<i>Less than 2,000</i>	<i>2,</i>

*Based on the data provided above, staff does not consider the capacity of Hillside Avenue to have been exceeded;*

- Hillside Avenue should be classified as a collector. As such and if you take the lower capacity collector (Minor Residential), the daily traffic volume and threshold capacities are never exceeded,*
- Hillside Avenue was built sub-standard for a collector (minimum of 10 foot wide travel lanes). Hillside, from a physically constructed standpoint, more closely resembles a local road. Even so, the local road threshold is not exceeded during a normal non-peak day and the number of trips recorded is within the streets acceptable daily traffic volumes*



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### Supporting Technical Information

#### Question:

Does the city have the authority to restrict commercial traffic on a city street and is the city required to update a road to meet increased traffic volumes?

#### Short answers:

There is no clear legal prohibition on the city regulating a city street according to type of use. However, regulations prohibiting “commercial traffic” may be problematic to implement and enforce, as discussed below.

The city is not obligated to update a road to meet increased traffic. However, the city has a strong interest in maintaining roads in a reasonably safe condition for travel.

#### Background:

The city has “sole jurisdiction and control of the city streets within the municipality.” Utah Code 72-3-104(4). Further, the city has the discretion to “lay out, establish, open, alter, widen, narrow, extend, grade, pave, or otherwise improve streets, alleys, avenues, boulevards.” Utah Code 10-8-8.

Although the City has discretion in terms of what roads to open and how to regulate their use, the City is also required to exercise due care in maintaining streets in a reasonably safe condition for travel. In terms of regulating the type of traffic on a street, this is often done by weight and size restrictions. A weight and size regulation likely has a nexus to the type or condition of the road, because it may be based on the weight the road was it designed for or on the weight it can currently withstand. Such a regulation may also be based on noise and attempting to make the road’s use compatible with the zone. However, regulating a road according to the purpose is more complicated. For instance, are FedEx or UPS deliveries a commercial purpose? What about Uber and Lyft, and, if they are commercial, how would they be identified? Is a contractor going to a house on upper Norfolk commercial activity? What about a flower delivery? Further, could staff justify such a restriction as related to the goal of reducing traffic on the road? There appear to be a number of pitfalls associated with **adopting and** enforcing a general “commercial traffic” regulation.

### STEPS

Staff encourages Council to review the comprehensive project list, **Exhibit D**, and provide a recommendation to staff on next steps. Consultant selection is underway for the robust Old Town Access and Circulation Study that will take approximately 9-12 months to complete data collection and recommend on a 5-year strategic plan.

### EXHIBITS MENTIONED IN THIS REPORT

**Exhibit B** – Tiered Project List Approved by Council on June 7, 2018

**Exhibit C** – Traffic Delay Microsimulation

**Exhibit D** – Crash data for significant streets in Old Town, provided by PCPD

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**Exhibit E** – Engineering Letter on Traffic Data Collection from May 2, 2019

**Exhibit G** – List of Possible Future Interim Projects

**Exhibit J** – Outreach Flyer Distributed to Residents August 2-4, 2019

**Exhibit M** – Community Outreach Notes from 8/7/19 Meeting

**Exhibit N** – Public Comments for the Record

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