



Cochrane Parking Review Stage 1

FINAL REPORT

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1 INTRODUCTION

1.1 PURPOSE OF PLAN

The Town of Cochrane retained Urban Systems Ltd. to review the existing parking supply and demand for Downtown Cochrane. This study will be the first stage of the overall parking plan and is intended to develop a foundational understanding on how public and private parking is functioning in the Downtown.

The second stage of the parking plan is to take the understandings from the existing supply and demand trends to develop the strategic parking policies and direction as part of the Stage 2 Parking Plan.

The focus for Historic Downtown in Cochrane is to understand how the existing supply is currently being used while in recognizing the overall turnover trends. Parking turnover provides a critical function along Main Street and adjacent areas where businesses have a close relationship with the public parking supply.

For South Downtown, it was important to address how current developments within this study area is influenced by the established parking rates as defined in Cochrane's Land Use Bylaws. Parking supply and demand was the focus for this area, to determine if existing parking rates were appropriate based on the parking trends.

The project team considered a number of key issues to be included as part of the Cochrane Parking Review. These issues were identified by Administration as important items to be addressed and include:

- Evaluate parking supply shortfalls within the Historic Downtown.
- Evaluate parking requirements as mandated by the Land Use Bylaw
- Evaluate the future parking requirements to support Downtown growth.

The report recognizes that each study area requires an individual assessment and strategies that are customized but consistent with the overall the Town's area structure plans. Together, Historic Downtown and South Downtown make up the study area for Downtown Cochrane Parking Review Stage 1.

1.2 DETAILS ON COMMUNITY

The Town of Cochrane is a growing community in Southern Alberta. Located approximately 40km west of Calgary, the Town is shaped by the Bow River, creeks, escarpments, topography, and major transportation corridors including the CP Rail Line and two provincial highways. Cochrane has grown substantially between the periods of 2011 and 2016, from 17,580 to 25,853¹ an increase of 47%. The community is expected to reach a population of 65,000 people by the year 2060.

National Household Survey collected data related to journey to work, which suggests the preferred method of travel for the residents of Cochrane is the personal vehicle. As illustrated in Figure 1-1 and Figure 1-2, the 2016 data suggests 84% of trips within the Town occur in a personal vehicle, while in 2011, 93% of trips occurs in a passenger vehicle. The decrease in vehicle trips to commute to the place of work could be attributed to increased investments in active transportation facilities and more people carpooling as part of their trip to work.

¹ Census Profile, 2016 Census

Cochrane, Town [Census subdivision], Alberta and Division No. 6, Census division [Census division], Alberta

Figure 1-1: 2011 Travel Behaviour

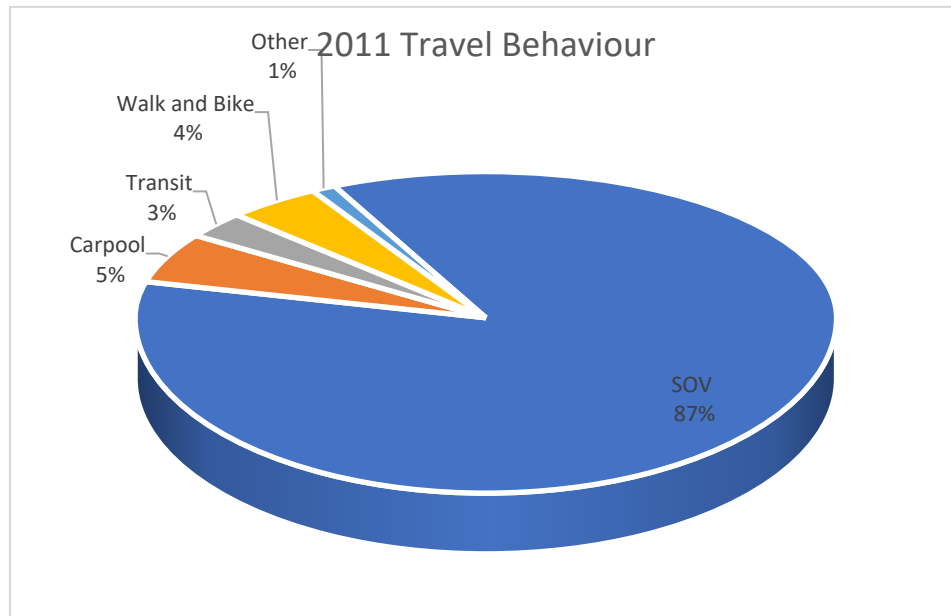
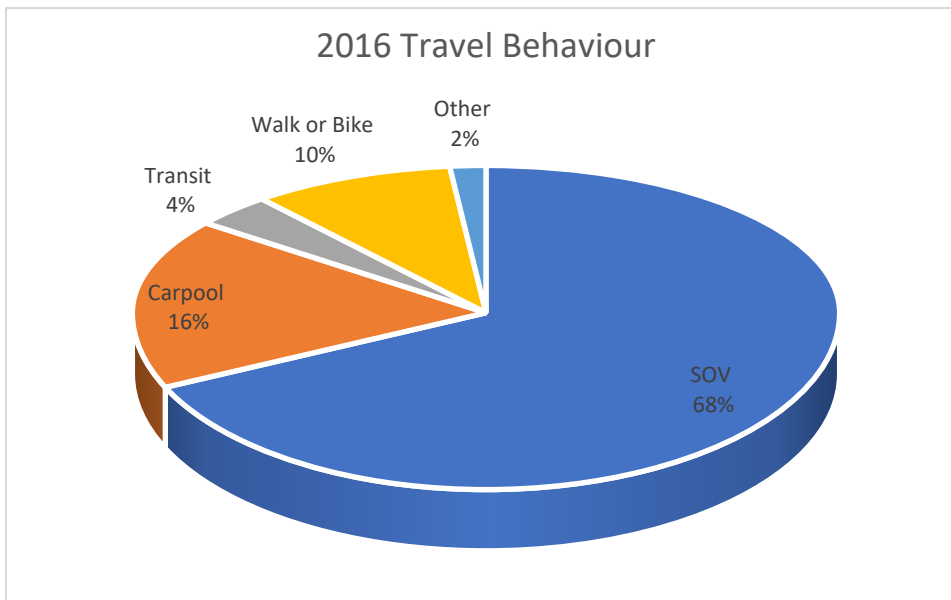


Figure 1-2: 2016 Travel Behaviour



2 EXISTING PARKING CONDITIONS – TAKING STOCK

2.1 STUDY AREA

Figure 2-1 illustrates the two study areas for Stage 1 of the parking review. Historic Downtown contains retail and commercial businesses that front onto the pedestrian space creating people orientated spaces. The business within the Historic boundary have access to both public and private parking supply. The private parking supply is generally accessible through an alley access or directly off the Town's street network. The study area is bounded by Highway 1A to the north, CP rail tracks to the south, Centre/River Avenue to the east and Fifth Avenue to the west.

South Downtown also contains an abundance of retail and commercial land with an emphasis on a larger scale. The services and amenities provided in South Downtown generally provide parking to customers in private parking lots. These parking facilities are typically located between the pedestrian sidewalks and the entrance to the business. This type of layout allows people driving to easily identify the businesses accessible along their route.

Figure 2-1: Study Area



2.2 RELATED PLANS AND POLICIES

MUNICIPAL DEVELOPMENT PLAN

Many of the principles of the Plan and supporting goals around growth management, environmental stewardship and economic viability rely on local and regional transportation connections for pedestrians, cyclists, and eventually transit users. The Municipal Development Plan (MDP) emphasize the need for a network that efficiently moves traffic, has improved regional connections, has a strong pathway network, and has strong integration for people walking, cycling, and taking local and regional transit into the larger transportation network. Specific parking policy language that are applicable to the Town of Cochrane Parking Review include:

- To design a strong multi-modal transportation network that provides the safe and efficient movement of people, goods, and vehicles. The design shall address vehicular and pedestrian movements and connections throughout the Town and region.
- To reduce the impact of traffic on local residential areas through suitable road and subdivision design.
- To provide for services in such a way that the demands on the transportation network are reduced.
- To improve the appearance of roadways and entranceways to Cochrane with emphasis on Highway 1A (Bow Valley Trail) and Highway 22 (Cowboy Trail) and gateways to the downtown,
- To ensure that roadways are upgraded and expanded in an environmentally sensitive and fiscally responsible manner.
- To work with CRP to promote regional transportation strategies

TRANSPORTATION MASTER PLAN

Cochrane has a transportation master plan that includes short term and long term multi-modal street improvements for the existing and future transportation network. Particular attention was given to enhancing the existing mobility network through network expansions, corridor upgrades, multi-modal considerations, and potential costs of implementation.



LAND USE BYLAW

The Town's Land Use Bylaw (No.01/2004) (LUB) governs the number of private off-street parking spaces required for different building types. The bylaw outlines minimum number of spaces per residential unit, square foot of development, or other variables. Developers are required to supply the prescribed amount of parking, unless a variance is granted by the Town or another acceptable substitute is provided.

The existing land use bylaw provides guidance for developers to provide compact parking stalls as a means of shifting vehicle types to ownership to compact cars. Developments are allowed up to 20% of the total parking stalls to be designated as compact spaces. While there has been an increased acceptance of the compact parking stalls, it has been identified during the development review process that applicants have been substituting required parking stalls with compact stalls to meet the parking requirements.

As of 2018, the Town has started the Land Use Bylaw Review Project, where the Administration will complete a comprehensive review and re-write to ensure the bylaw remain current and effective in regulating land uses and development within the Town.

As the parking strategy evolve for Downtown Cochrane, it can be expected that potential parking strategies as they develop will align closely with the Land Use Bylaw Review. Table 2-1 summarizes the existing parking requirements as part of the LUB.

Table 2-1: Typical Parking Rate for the Downtown

USE OF BUILDING OR LOT	MINIMUM NUMBER OF PARKING SPACES
Autobody Shop, Automotive Parts Sales, Automotive Repair Shops, Automotive Sales or Rental	1 stall per 37 m ²
Bed and Breakfast Accommodations	1 stall per rented room
Car Washes	3 stack-up stalls per wash bay 1 stall per 37 m ² for accessory uses
Child Care Services including: <ul style="list-style-type: none"> • Day care facilities • Pre-schools • Nursery schools 	5 or 1/6 children calculated whichever is greater
Commercial, Multi-Use Developments	4 stalls per 93 m ²
Beer Parlours, Cocktail Lounges	1 stall per 3 seats
Eating Establishments	1.25 stall per 4 seats
Entertainment Establishments	1 stall per 5 seats
Bank	1 stall per 37 m ²
Hotels, Motels	1 space/guest unit plus for accessory uses 50% of the required parking calculated on the individual uses listed in Table 11.3.1(d) (e.g., retail stores: 1/74 m ²)
Industrial, Multi-Use Developments	2.2 stall per 93 m ²
Manufacturing Plants	1 stall per 56 m ²
Offices	1 stall per 37 m ²
Post Offices	1 stall per 25 m ²

Recreational Facilities (Indoors)	a) 1 stall per 2 participants or 1 stall per 7 seats, whichever is greater
a) Arenas, Assembly Facilities, Gymnasiums	b) 6 stalls per sheet of ice plus 1 stall per 10 seats for accessory uses
b) Curling Rink	c) 1 stall per 20 m ²
c) Billiard Hall and Pool Rooms	d) 5 stalls per bowling lane plus 1 stall per 8 seats for accessory uses
d) Bowling Facility	e) 1 stall per 15 m ²
e) All others	
Retail Stores and Repair and Service Shop	1 stall per 37 m ²

2.3 PRIVATE PARKING/OFFSTREET PARKING

2.3.1 CASH IN LIEU

Parking for a new development shall be by full provision on-site or in combination with payment-in-lieu for parking spaces that are deficient. When payment-in-lieu is accepted by the Town Development Authority, the money shall be directed to a fund for future development of parking facilities.

The Town also has a Parking Cash-in-Lieu regulation and can be applied upon the discretion of the Development Authority. The cash payment in lieu of the non-handicapped parking spaces can be applied for up to a maximum of 20% of the total parking spaces required by the development. At the time of writing, the cash in lieu payment is set at \$20,000 per stall.



3 PARKING INVENTORY

3.1 SUPPLY

HISTORIC DOWNTOWN COCHRANE

Historic Downtown is made up of both on-street and off-street parking. On-street parking are publicly accessible stalls provided by the Town of Cochrane and represents the most valuable parking supply in the downtown area for visitors as it is often the first choice because of its visibility and convenience. Off-street parking within the Historic Downtown are surface lots located on private property. These private parking stalls (accessible through the laneways) are typically reserved for employees for the business. For business established in a plaza or mall context, the available off-street parking stalls can be used by customers and employees. Within the Historic Downtown, there are approximately 310 on-street and 690 off-street parking stalls available within the 173,000 sq.m study area. On-street and off-street parking are free of charge and have no time limit which can provide customers, visitors, and staff with long-term within the Historic Downtown catchment.

Restrictions for on-street parking is typically marked by yellow paint which can be generally found adjacent to fire hydrants, cross walks, sight line limitations, intersection, and other constrained areas.

Marked angle parking stalls are available in three locations and can be found at:

- 1 Street North (between 3 Avenue and 1 Avenue)
- 2 Avenue East (between 1 Street and 2 Street)
- 1 Avenue West (between 1 Street and 2 Street)

The remaining public parking supply within the Historic Downtown area are parallel parking stalls mark by signage and yellow curb paint. The current unrestricted on-street supply allows for maximum convenience for visitors in the historic area.

SOUTH DOWNTOWN COCHRANE

Large scale institutional, retail, and commercial businesses are located within South Downtown with parking generally contained on the private site. Parking availability within the private sites are governed by the Town's Land Use Bylaw which stipulates the number of stalls that must be provided for a business based on use or area. There are opportunities for vehicles to park on-street within South Downtown however, these on-street parking corridors are limited to certain locations. There are approximately 4,100 parking stalls that are available between the various residential, commercial, retail and institutional uses. It is expected as the Quarry continues to develop, additional private parking stalls will be added to the existing inventory as required by the existing LUB.

Table 3-1 summarizes the parking availability within the Downtown study area. On-street parking in South Downtown was not reviewed as part of the Stage 1 based on concerns isolated to private parking lots.

Table 3-1: Available Parking Stalls in by Downtown Location

	Public Parking	Private Parking
Historic Downtown	313	687
South Downtown	252*	4,136

*Observed along Railway Street, Grande Avenue & Grande Boulevard

4 PARKING DEMAND – DOWNTOWN COCHRANE

4.1 DAILY PARKING PATTERNS

For this assignment, the demand for parking is the observed number of vehicles utilizing parking spaces in each area within a particular time frame. Parking demand varies by time (month of year, day of week, hour of day) and by location. Although parking demand varies throughout the day and has different patterns on weekdays and weekends, peak periods are normally used for planning purposes. Peak periods for downtown areas are typically midday during the weekday and weekend. This section provides an assessment of parking demand in Downtown Cochrane based on data collected as part of this study.



Data was collected in Historic and South Downtown to understand the existing supply and demand. A parking data collection team surveyed on-street (public) parking demand in the *Historic Downtown* on Thursday, June 22 and Saturday, June 24 between 11:00 and 18:00. The occupancy survey recorded the number of vehicles parked in each block (on-street) every half an hour through the data collection period.

For the *South Downtown* parking data collection, an unmanned aerial vehicle (UAV) team was deployed to collection parking data on Thursday, August 3 and Saturday, September 23. The UAV pilot and spotter captured aerial images of the surface parking lots (off-street) every half hour throughout the study area for the duration of the study period.

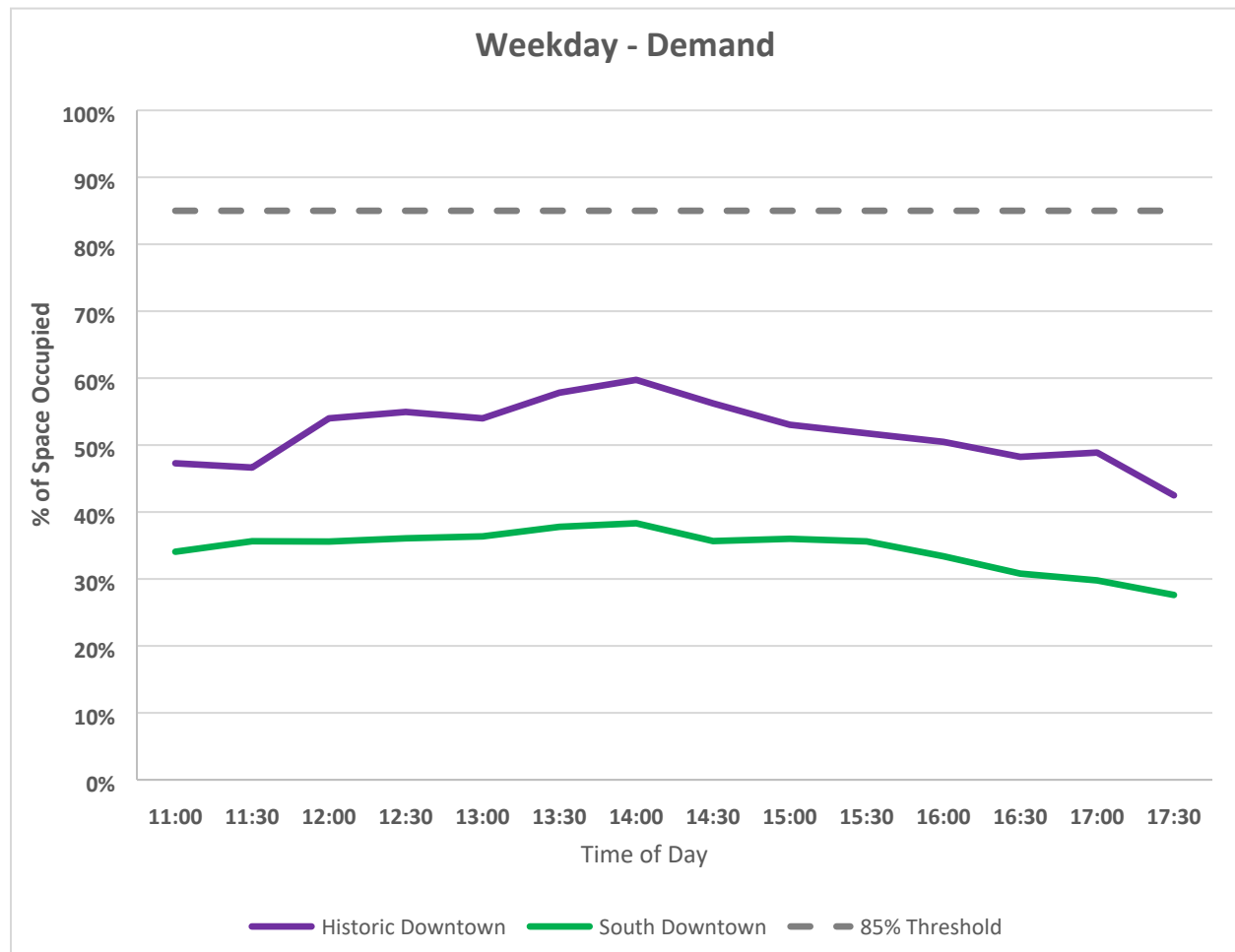
Parking demand can be expressed as the percentage of spaces in use (i.e. utilization). The utilization in half hour increments is illustrated in Figure 4-1 (Weekday) and Figure 4-2 (Saturday.) As a rule of thumb, 85% to 95% utilization is generally referred to as the practical capacity of the publically-accessible parking system in downtown areas and is a suitable target to balance a high degree of availability while maximizing the available inventory. The 85% utilization rate is marked with a dotted line on the figures.

The data illustrated that during the peak parking period, Historic and South Downtown overall experienced an occupancy rate much less than the 85% threshold. During the weekday both study areas had a parking peak period between 14:00 and 15:00. The utilization rate for on-street parking in the Historic Downtown on average was around **60%** during the peak period where 187 on-street spaces were occupied from the 313 available on-street stalls in the Historic Downtown.

South Downtown during the same period experienced an average off-street parking peak utilization rate at around **38%**. Where 1,585 surface stalls were occupied from the 4,136 available parking

supply. It's worth noting that depending on the type of use, the parking utilization may be higher (e.g.: office uses during weekday vs office uses during weekend).

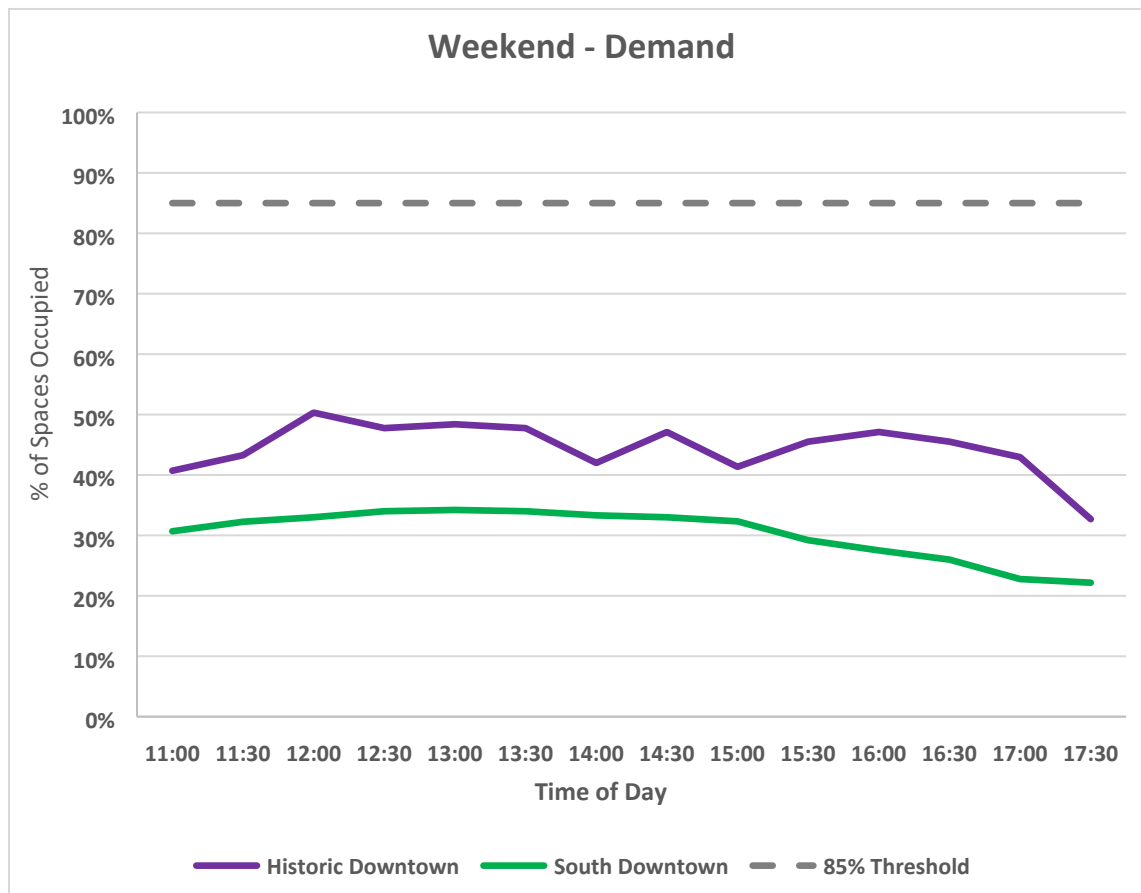
Figure 4-1- Weekday Parking Demand in Downtown Cochrane



During the weekend, the Historic Downtown peak parking period is around 12:00 with an average on-street utilization rate at **50%** for the catchment area. During the weekend peak, the data collected noted 157 stalls were occupied from the available 313 parking supply within the Historic Downtown area.

South Downtown experienced a parking peak at 13:00 and had an average off-street utilization rate at **34%**. From the available 4,136 off-street parking supply, 1,406 stalls were utilized during this period.

Figure 4-2 - Weekend Parking Demand in Downtown Cochrane



4.2 HISTORIC DOWNTOWN – OCCUPANCY PATTERNS

Parking utilization patterns also change on a block by block basis. Figure 4-3: Historic Downtown Parking Utilization – Weekday Pattern and Figure 4-4: Historic Downtown Parking Utilization - Weekend Pattern illustrates the weekday and weekend parking occupancy by block during the peak periods for Historic Downtown. The parking patterns illustrated in the figures can provide insight into how the public supply is used and can further influence future on-street parking management and strategic parking policy. These figures must be reviewed with caution as short blocks can overstate results due to the limited number of available parking spaces (e.g. 3 of 3 stalls occupied would equate to a 100% occupancy rate).

Many blocks have an average utilization of less than 55% on a weekday. During the weekend the average utilization rate for the Historic Downtown supply is around 50%. Most of Main Street, for example, has utilization of less than 50% during the peak period when considering the available supply on both sides of the street. It is interesting to note that for the entire length of Main Street (west of 5 Avenue to River Avenue) the average occupancy rate is less than 50%.

While the data suggest on average, the overall on-street parking supply in the Historic area is well below the 85% threshold, there are isolated blocks where on utilization is near the 85% threshold Main Street between 2 Avenue and 1 Avenue has an average weekday occupancy rate of 82% where during the day there is a 2.5 hour period (between 15:00 and 17:30) the demand is above 85% (88% to 94%). 75% of the

vehicles using the available parking in this segment stay for 0.5 hours or less. During the peak parking period for the Historic area, this segment of Main Street is 100% occupied between 14:00 and 14:30. However, directly across the street where on-street parking is available, the average daily utilization for this street is 62% and for the same 2.5 hour period, the demand along the southside of Main Street is below 85% (63% to 75%). When on-street parking on Main Street is 100% on the north side, south adjacent to the Court House is around 50% utilized. Most notable attraction in this segment is McKay's Ice Cream.

The weekend data illustrates similar parking behavior during the weekend, however, the duration where parking demand is above 85% has increased from 2.5 hours to 6 hours. When evaluating the parking demands adjacent this segment, the overall utilization average is well below the 85% threshold.

Based on the data collected it is clear that during the weekday and weekend periods, parking in certain blocks of Historic Downtown is more utilized than others. While it is common for people parking to want convenient and available parking, from a planning perspective this combination tends to have its challenges. Free and convenient parking can exist; however, the supply will be limited. Conversely, parking can be free and readily available, but it will not be convenient for the person parking and wanting to visit a business.

Table 4-1: Typical Parking Scenarios

Scenario 1	Free & Convenient <u>NOT</u> Available
Scenario 2	Free & Available <u>NOT</u> Convenient
Scenario 3	Available & Convenient <u>NOT</u> Free

Figure 4-3: Historic Downtown Parking Utilization – Weekday Pattern

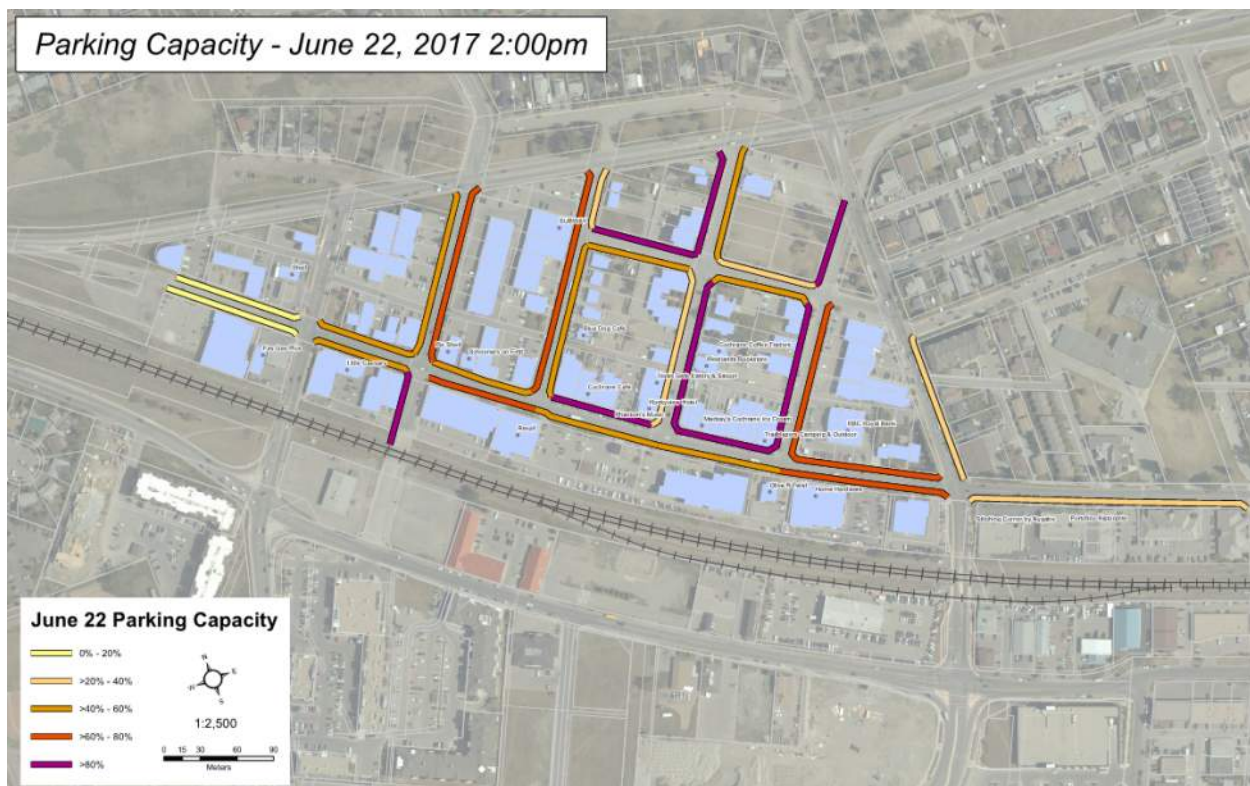


Figure 4-4: Historic Downtown Parking Utilization - Weekend Pattern



4.3 SOUTH DOWNTOWN – OCCUPANCY PATTERNS

Parking patterns recorded in South Downtown change based on time of day and business type. The patterns allow us to understand the type of utilization in these private parking areas and how it relates to the existing land use bylaws. It was as noted that for certain types of development, the approved application exceeded the parking rates in anticipation of peak customer activity during specific days in the year. Figure 4-5: South Downtown - Weekday Pattern and Figure 4-6: South Downtown - Weekend Pattern provide insight into the parking demands for each private lot in relation to the development.

The data collected illustrate that while on average the occupancy rate for the area is less than 40% during the collection period, the parking areas with the most demand tend to concentrate with uses related to grocery stores where the utilization rates is consistently between 40% to 60% during the peak weekday and weekend period.

These figures should be interpreted with caution for private parking areas within South Downtown with utilization rates above 80% understanding that the parking demand may be for residential or auto mechanic related uses.

Cochrane Parking Assessment
Phase 2 Capacity - 2:00pm
August 3, 2017

Capacity

- 0 - 20%
- 20 - 40%
- 40 - 60%
- 60 - 80%
- > 80%

1:3,500

Cochrane Parking Assessment
Phase 2 Capacity - 1:00pm
September 23, 2017

Capacity

- 0 - 20%
- 20 - 40%
- 40 - 60%
- 60 - 80%
- > 80%

1:3,500

4.4 HISTORIC DOWNTOWN – TURNOVER PATTERNS

Parking turnover is another measure of how on-street parking spaces are used. Turnover measures how long vehicles stay in a parking space which reflects whether it is serving short-term visitor use or longer-term employee or residential use. This is an important part of the assessment since vibrant downtown areas typically exhibit high parking turnover rates with low time spent per vehicle. High turnover means that more people are coming to Downtown Cochrane, doing business, and then leaving. This maximizes the use of valuable land and increases economic vibrancy for businesses. The value of a high turnover parking stall in central areas is worth approximately \$50,000 to the local business economy.²

For the turnover survey, the parking data collection team recorded the license plate numbers for each vehicle parked in each block of the turnover assessment area every half hour. The analysis team used these license plate records to estimate the length of stay for each vehicle at half hour intervals. While collecting occupancy and turnover data, the parking data collection team also recorded observations concerning issues and challenges and noted special parking patterns, such as loading zone use / misuse, illegal parking, and other issues.

Turnover patterns for Historic Downtown are shown in Figure 4-7 and Figure 4-8 4-8 for the weekday and weekend period respectively. Overall, the on-street parking supply experienced a reasonably high turnover, with about 60% of people parking leaving the public parking spaces within 30 minutes on the weekday and just over 50% of vehicles parked turnover on the weekend within the same 30 minute duration. This shows that the core business area in the Historic Downtown experiences reasonable turnover, which is good for economic vibrancy.

It is interesting to note the number of vehicles parked on-street longer than 4 hours, which could indicate that potential staff for adjacent businesses are occupying the on-street supply during business hours. Just under 10% of people parking utilize the on-street parking space for 4 hours or more and on the weekend, just under 15% of cars park for 4 hours or more. Long term on-street parking should be carefully monitored to ensure the public parking supply is used efficiently.

² Sandahl, L, Parking as Income Generator for Commercial Activities in Town Centres, Institutionen Foer Infrastruktur Och Samhaellsplanering, 1997.

Figure 4-7- Weekday Turnover - Historic Downtown

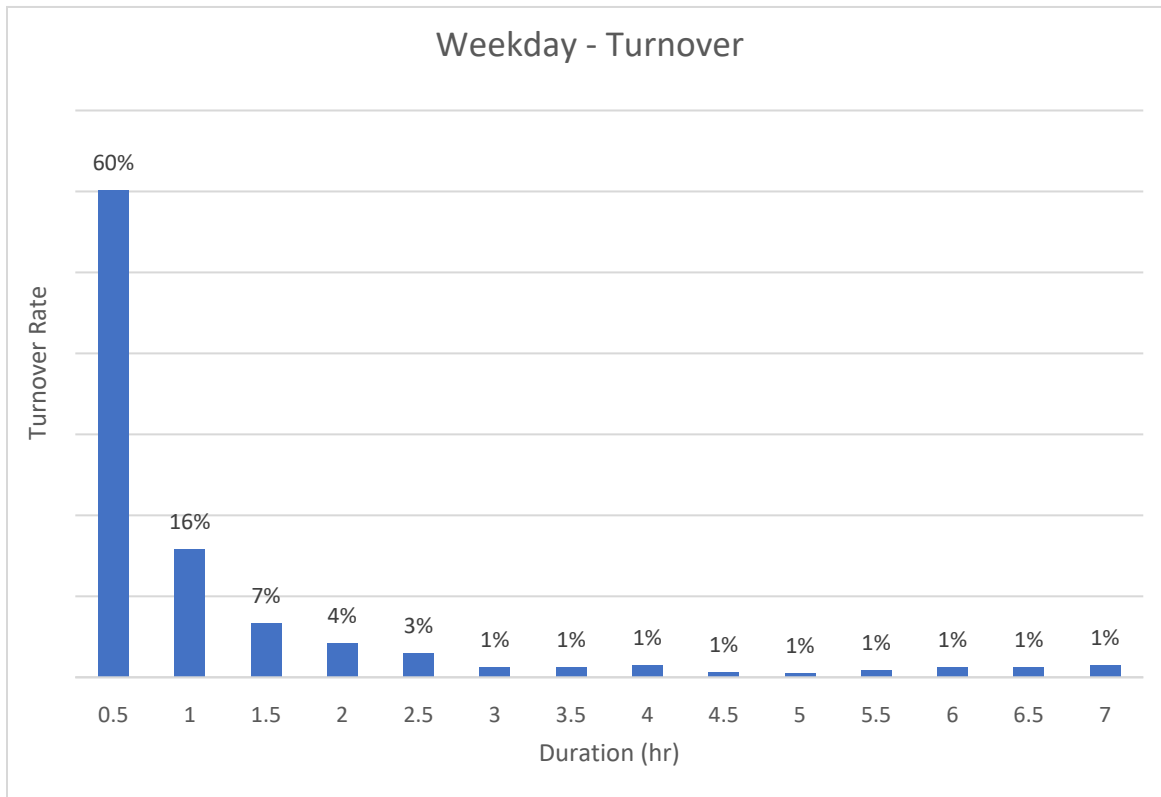
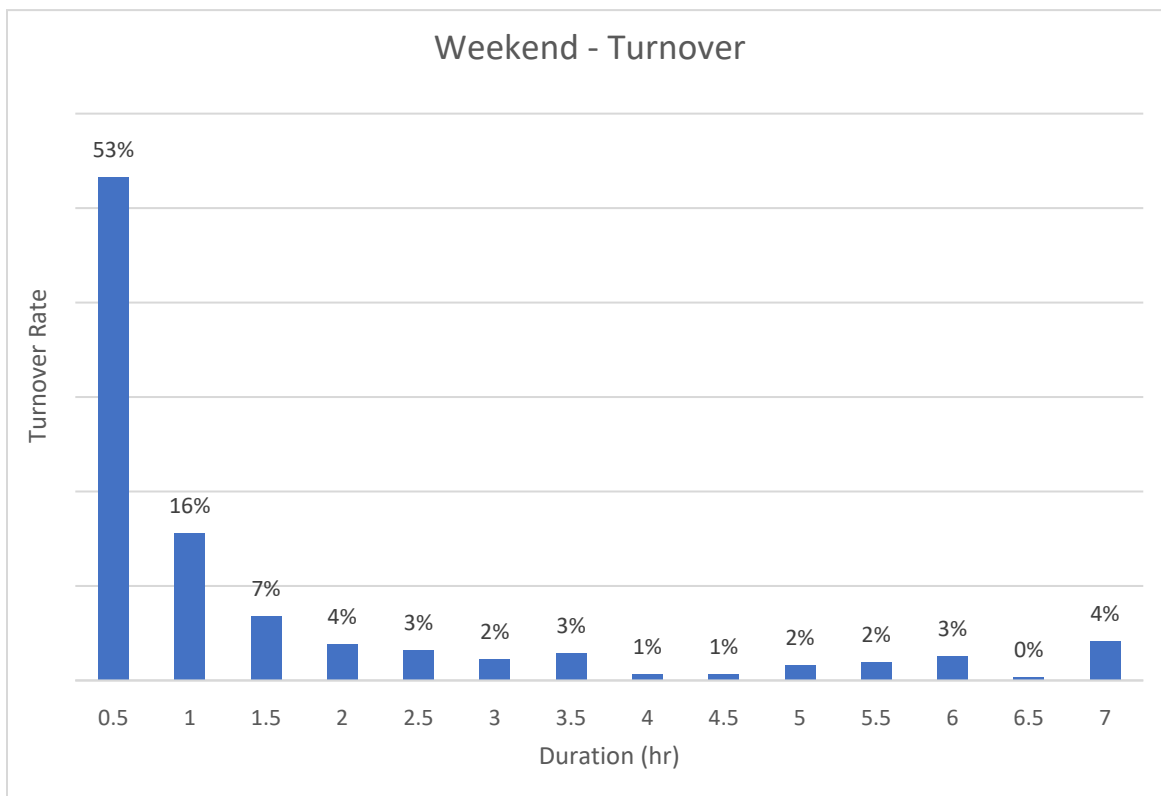


Figure 4-8 - Weekend Turnover - Historic Downtown



5 FUTURE BASE CONDITIONS

This part of the study examines future base conditions. The intention is to determine future changes in parking demands based on anticipated growth and development plans. This phase analyzes available information, growth patterns, and parking trends to understand the future needs to be addressed in the development of the strategy.

There are two methods for estimating future parking demand. The first method requires the use of historical and forecasted growth rates. The second method is the collection of proposed development that correspond to parking supply calculation based on the Land Use Bylaw or industry standards. A hybrid method will be used to determine the future parking demand for Downtown understanding as planning horizons change, predicting the future supply will be challenging.

5.1 DOWNTOWN FUTURE PARKING PROJECTIONS

The Town of Cochrane has been rapidly increasing its population for the past 5 years. Statistics Canada recorded a positive 45% change in population between 2011 and 2016 and a 27% increase in population between 2006 and 2011. As growth stabilizes within the Town of Cochrane, the Growth Management Strategy identifies that future intensification will be concentrated in the redeveloping areas which includes Downtown Cochrane. It is estimated as Cochrane surpasses the 60,000-population threshold, 25% of the growth will be in the redeveloping areas (or 0.56% per year over 45 years). It can be expected that Downtown Cochrane would see a proportion of the future growth.

The Town is expecting three sites to be redeveloped within the next 5 to 10 years. The Old Town Hall Site located at the southwest corner of Highway 1A and Centre Avenue the vacant Esso Bulk site along Railway Avenue, and the Tri-Site Development. The old Town Hall site will have private parking as part of the development agreement while lands identified as part Tri-Site Developments is evolving. At the time of writing, the Tri-Site Development is still in its conceptual planning phase and will include a transportation assessment as part of the proposed plan.



It can be expected as new development and redevelopment occurs within the Downtown, the parking inventory will evolve based on current demands and land use bylaw requirements. As a result of the redevelopment on the Old Town Hall Site, approximately 9% of the public parking supply will be removed to accommodate the potential site reconfiguration. It is understood at the time of the report the proposed site will have private parking contained on-site or underground with a potential redesign for on-street parking.

It should also be noted that based on the conceptual layout for the future Mobility Hub, private parking in the Historic Downtown maybe affected with the proposed conceptual grade separate crossing. The proposed elevated crossing will require abutments that will need to be structurally placed to support the rail crossing. However, as part of the next phase, the parking strategy will revisit the potential parking supply implications to further develop the Downtown parking policies and strategies.

Table 5-1 and Table 5-2 summarizes the existing parking supply and the forecasted demand in Historic and South Downtown Cochrane respectively. The 2017 peak parking demand volume was based on the weekday and weekend count. The 10 year future parking demand was calculated based on the estimated intensification rate over the project build-out assuming redevelopment is to occur primarily in Cochrane's Downtown.

It is interesting to note that during the weekday period, the utilization rate is around the 60% based on the available supply during the future 10 year period for the Historic and South Downtown. During the weekend, the utilization rate decreases to around 50% for Historic Downtown and 40% for South Downtown. This relationship could be related to office and other uses that tend to operate on a Monday to Friday schedule.

Table 5-1: 10 Year Weekday Forecast Demand

	Existing Supply	2017 Demand	2027 Demand
Historic Downtown	313	187	197
South Downtown	4136	1585	2473

Table 5-2: 10 Year Weekend Forecast Demand

	Existing Supply	2017 Demand	2027 Demand
Historic Downtown	313	157	165
South Downtown	4136	1415	1494

Cochrane's future parking projections and demand assumes trendline parking behavior. It is worth noting that parking is part of an overall transportation strategy for every community. Depending on the long-term transportation goals, future parking plans and strategies must consider future mobility investments.

At the time of writing, the Town has completed an update to the Transit Strategy where the preferred system from the Town's Transit Task Force was an on-demand system. Depending on the deployment of the on-demand system, there could be a significant shift in parking demand and other mobility benefits. Understanding the characteristics of transit and on-demand mobility solution, future parking requirements could potential shift into a direction many may not have seen in the past.

To measure the potential affects of the transit system and other mobility services, a monitoring program should be implemented to inform possible improvements to increase the Town’s ability to move people.

6 CONCLUSION

The overall parking system in Downtown Cochrane is a combination of Town-owned public parking and privately own surface parking lots. There is a segment of private parking in the Historic area that is accessible through the laneway that was analyzed but identified for potential parking inventory availability.

The parking supply is Downtown Cochrane is capable of handling the peak hour demands as suggested by the data collected in 2017. Parking demand during the peak hour in the Historic and South Downtown location is around the 60% and 40% threshold respectively which indicates within the respective study areas, availability exists when considering the 85% parking benchmark practical purposes.

As mentioned in the data analysis, existing supply in South Downtown has a 40% utilization rate, when indicate in general, 60% of the parking supply is available for customers visiting the businesses in this area. This is an interesting observation which can indicate that developers are potentially over dedicating parking stalls for the development or the existing parking rate in the land use bylaw may need to reflect the demands specific to this area. It was also mentioned as part of the review that approved uses may not be functioning as it was intended at the time of approvals (old Canadian Tire Site).

For the Historic Downtown study area, the overall parking demand is around 55% much less than the 85% practical parking availability threshold. However, certain blocks within the Historic area experience parking demand above the practical benchmark (e.g.: parking segments adjacent to McKay’s Ice Cream). The parking patterns established during the peak parking period is interesting, as shown in the Figure 4-3 and Figure 4-4: Historic Downtown Parking Utilization - Weekend Pattern, on-street parking can generally be found immediately across the street, or at the next block.

Based on the parking patterns established through the data collection there are opportunities to better optimize the existing public and private parking supply by identifying long term parking principles and goals. As indicate by the Town’s MDP, “services should be created or optimized to reduce the demand on the transportation system”.

Phase 1 established the existing parking behavior and how the system is currently used by customers and visitor within the study area. As part of Phase 2, developing the Parking Plan, parking themes and strategies can be advanced to incorporate the following:

- Opportunities for an efficient parking system using the existing supply in Cochrane’s Downtown.
- Encourage higher turnover in areas where parking is in high demand while managing congestion concerns
- Allow customers and visitors to entering Downtown to park once and reach any destination
- Parking plans should be flexible to accommodate uncertainty
- Parking facilities should be sized and managed, so spaces are frequently occupied
- People in the Downtown should have viable parking and mobility options
- Parking should serve multiple users and destinations
- Encourage alternative modes as a means to reach Downtown attractions

- Explore potential for parking maximums
- Explore possibility to remove parking minimums

Over the past 10 years, the Town has advanced several planning and policy documents that guide decision making and service delivery across all aspects of municipal life. Cochrane's Parking Plan will contribute to the overall transportation strategy as part of the long-term community goals.

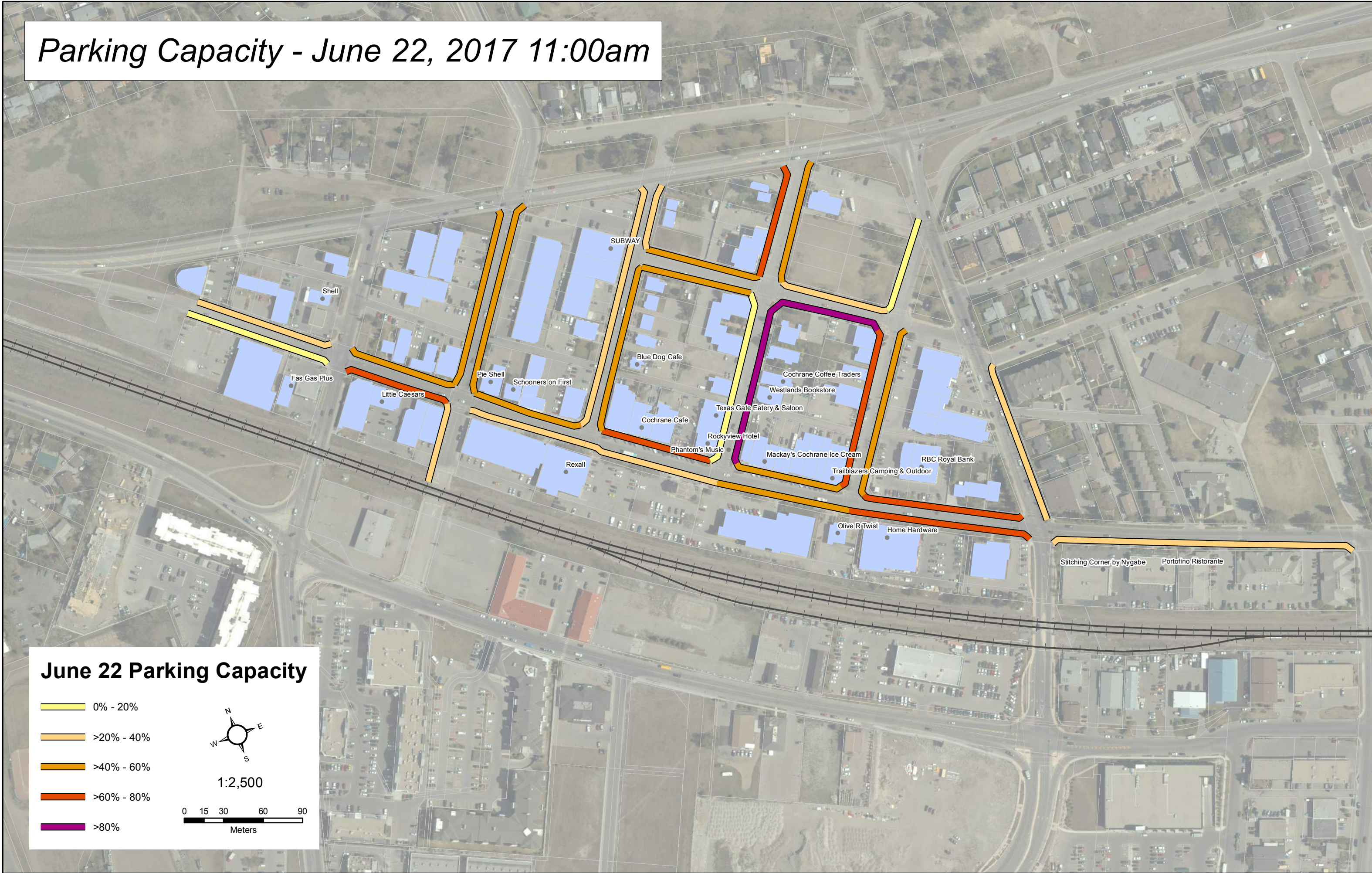
7 NEXT STEPS

Phase 2 of the Town's Parking Plan will include optimizing the existing parking system, developing possible strategies to increase the utilization efficiency from the available parking inventory. Stakeholder in the study areas including business owners will need to be included as part of the broader conversation developing the future parking plans for the Downtown. Possible tasks for Phase 2 can include:

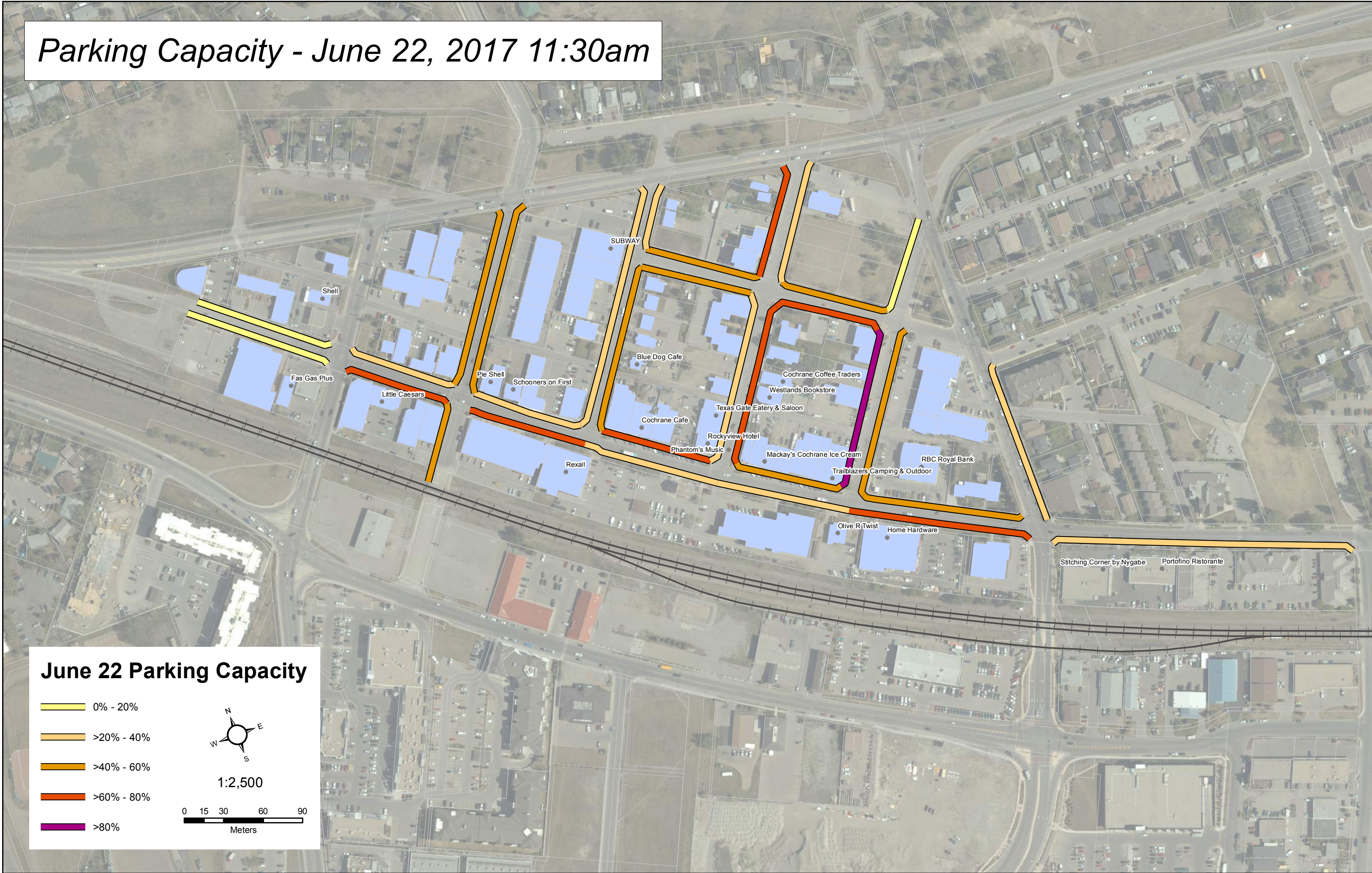
- Refine parking goals and principles
- Engage internal departments and development community on redefined parking principles
- Develop parking strategies to optimize existing available supply
- Develop parking policies that support efficient use of existing and future parking supply

Appendix A – Historic Downtown Demand

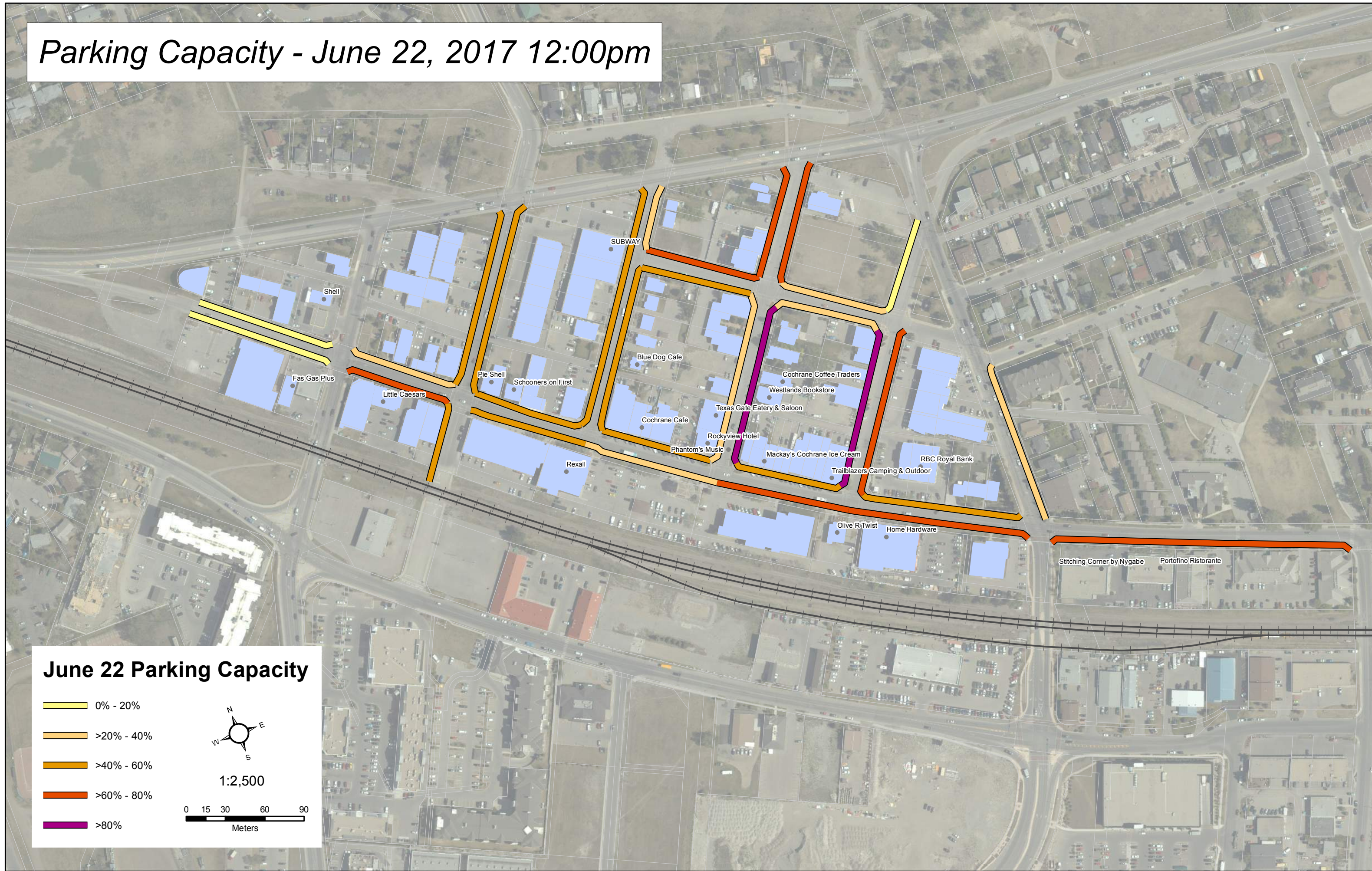
Parking Capacity - June 22, 2017 11:00am



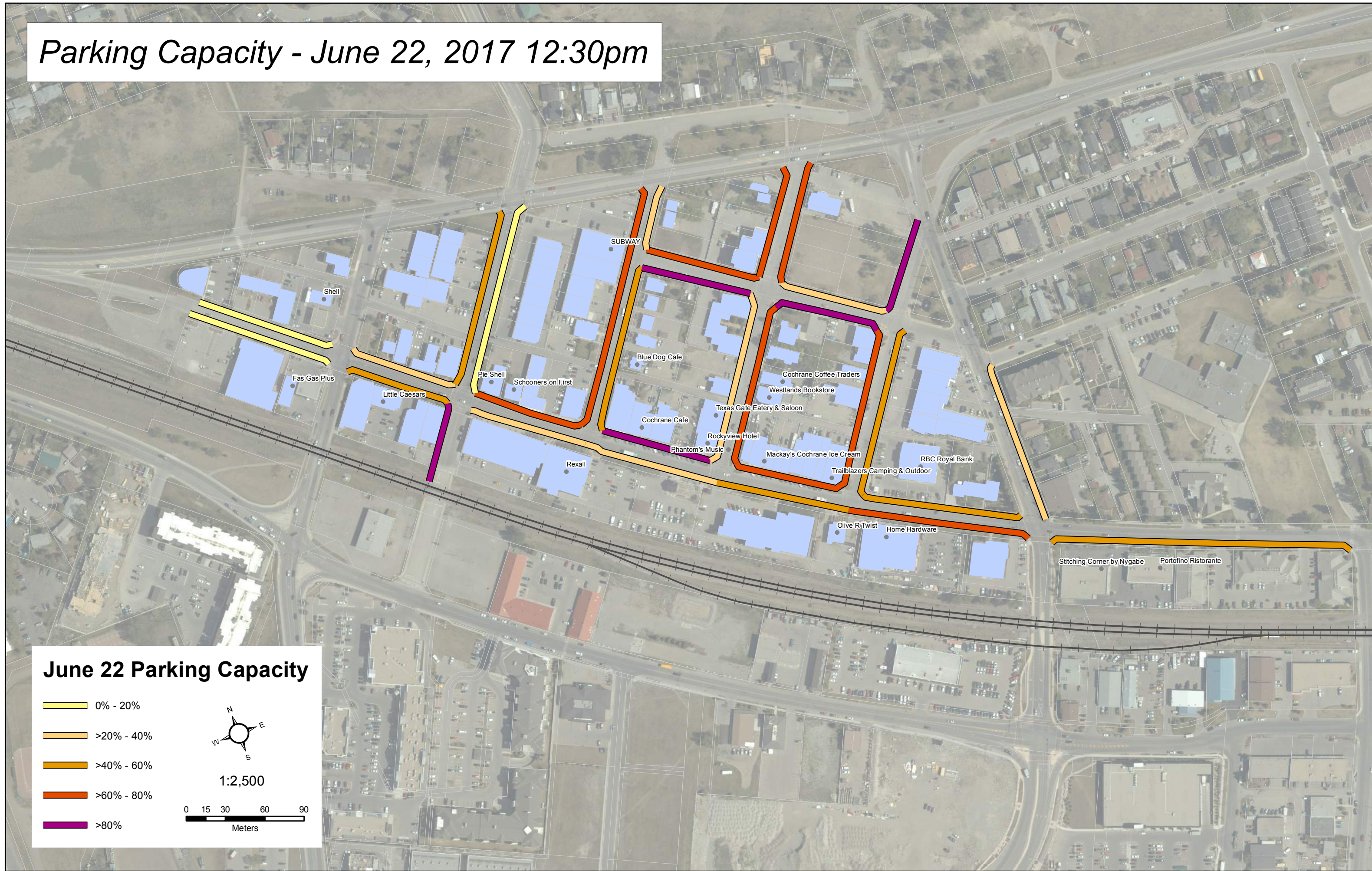
Parking Capacity - June 22, 2017 11:30am



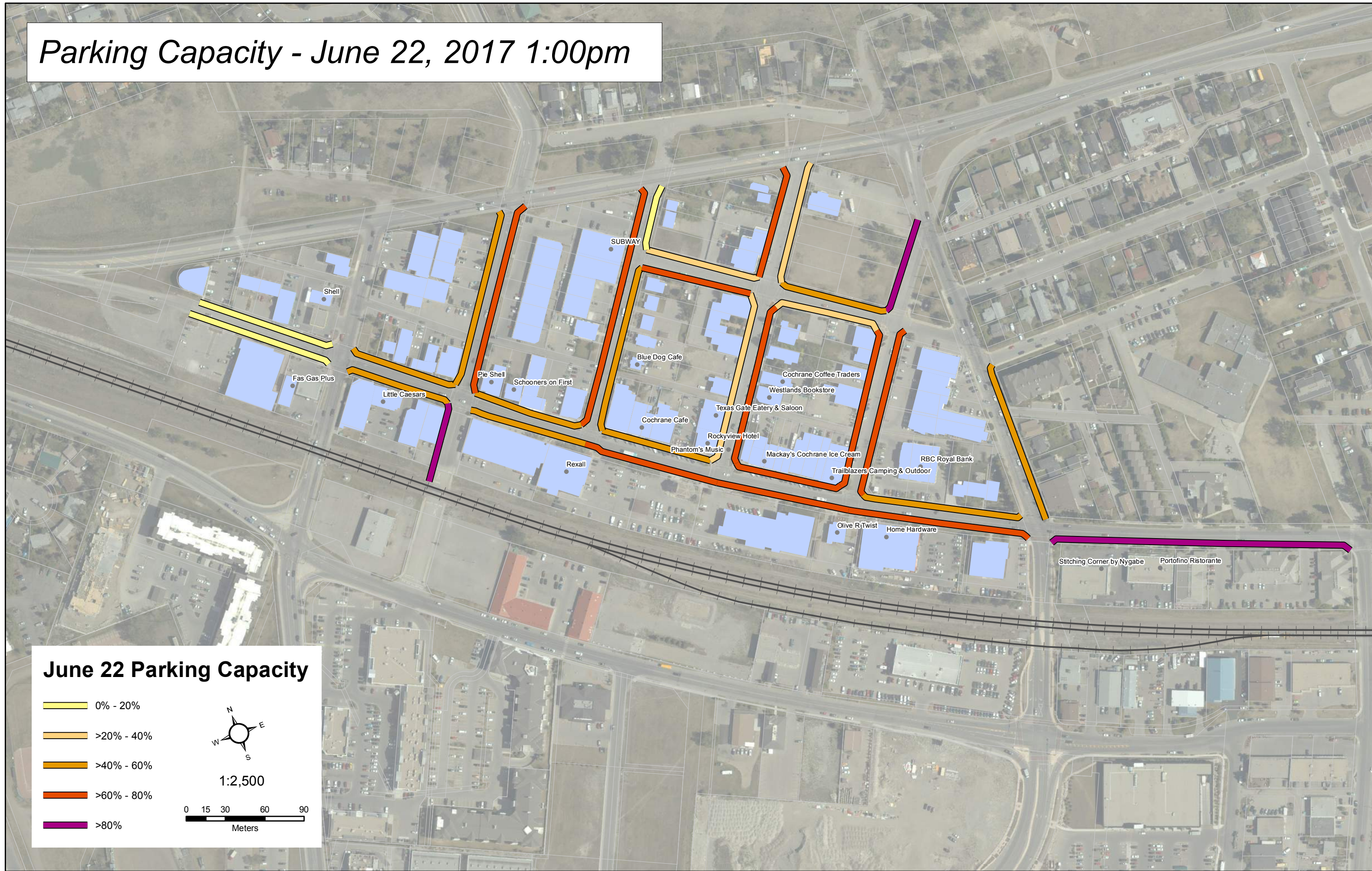
Parking Capacity - June 22, 2017 12:00pm



Parking Capacity - June 22, 2017 12:30pm



Parking Capacity - June 22, 2017 1:00pm



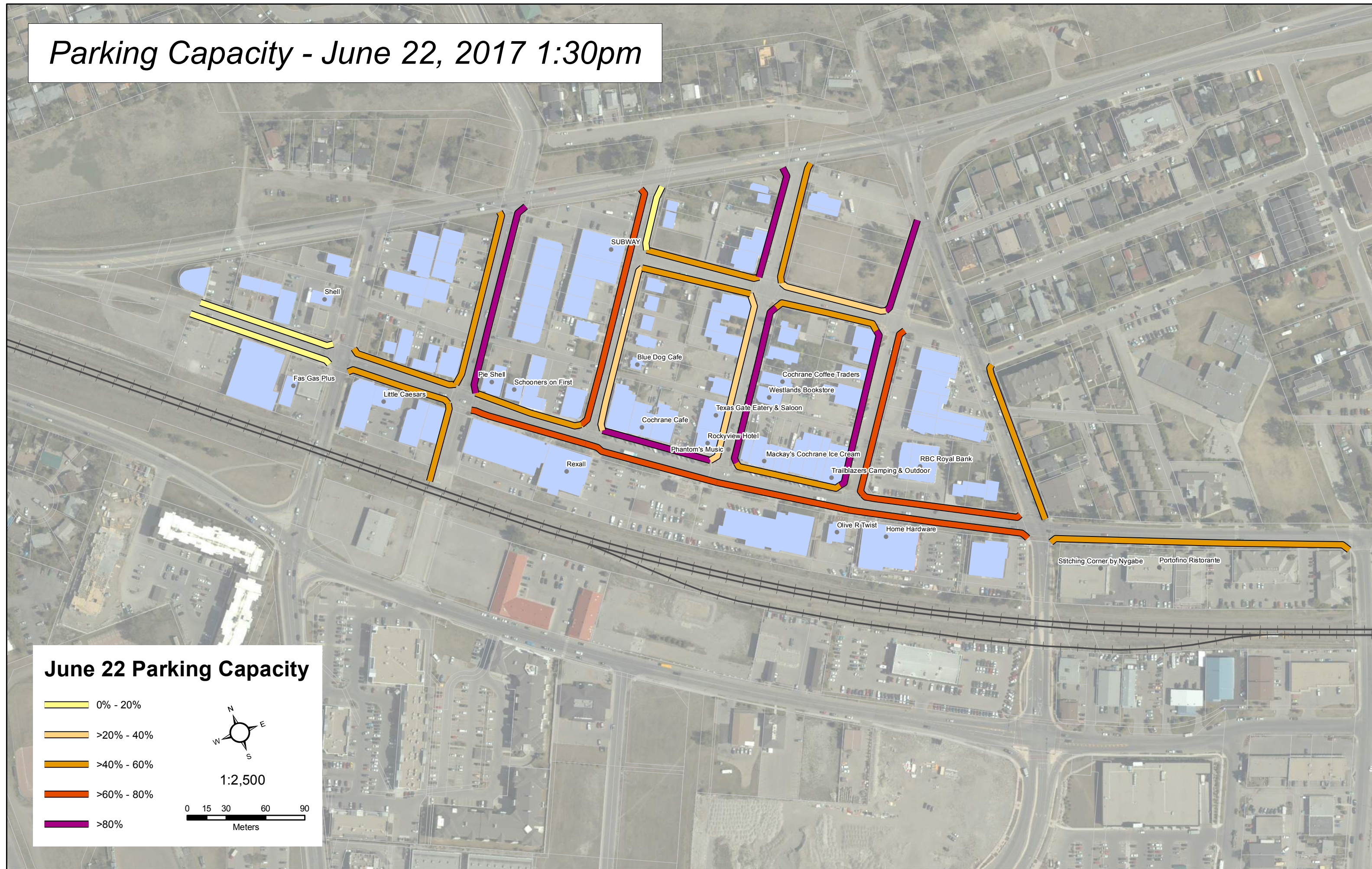
June 22 Parking Capacity

- 0% - 20%
- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%

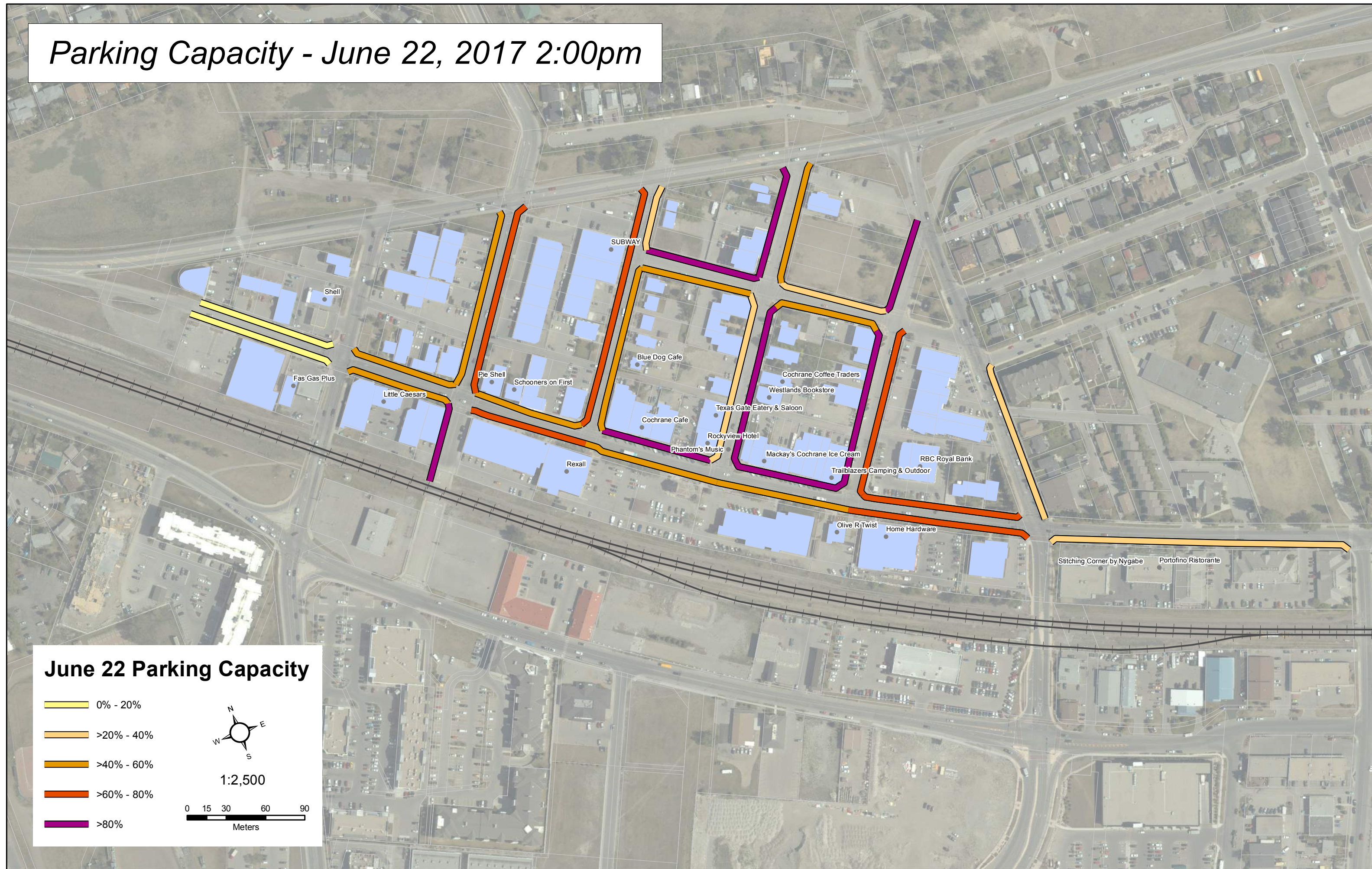
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0 15 30 60 90
Meters

Parking Capacity - June 22, 2017 1:30pm

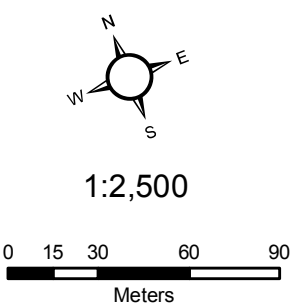


Parking Capacity - June 22, 2017 2:00pm

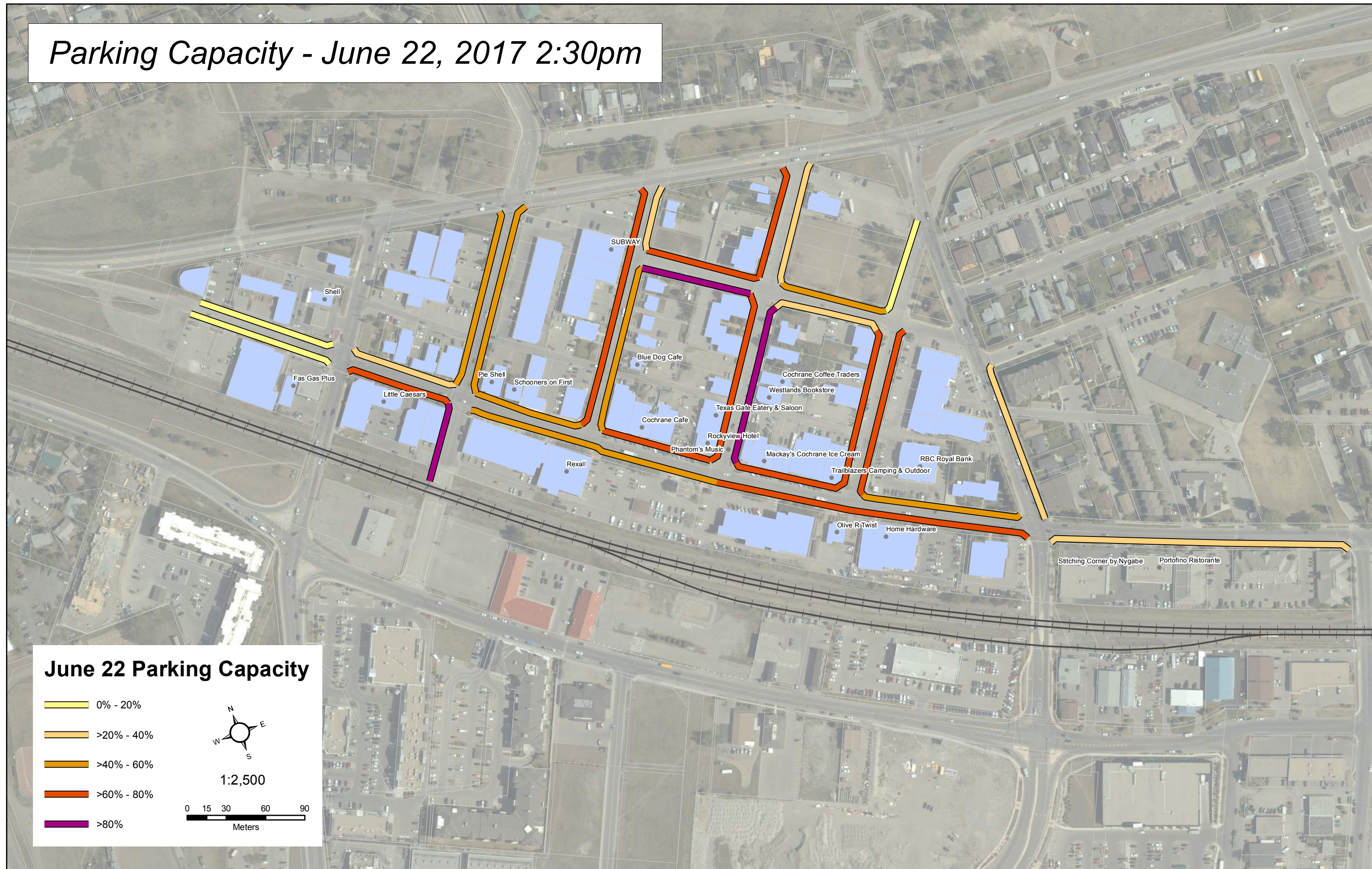


June 22 Parking Capacity

- 0% - 20%
- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%

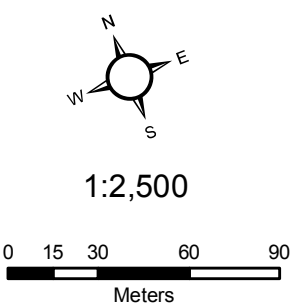


Parking Capacity - June 22, 2017 2:30pm

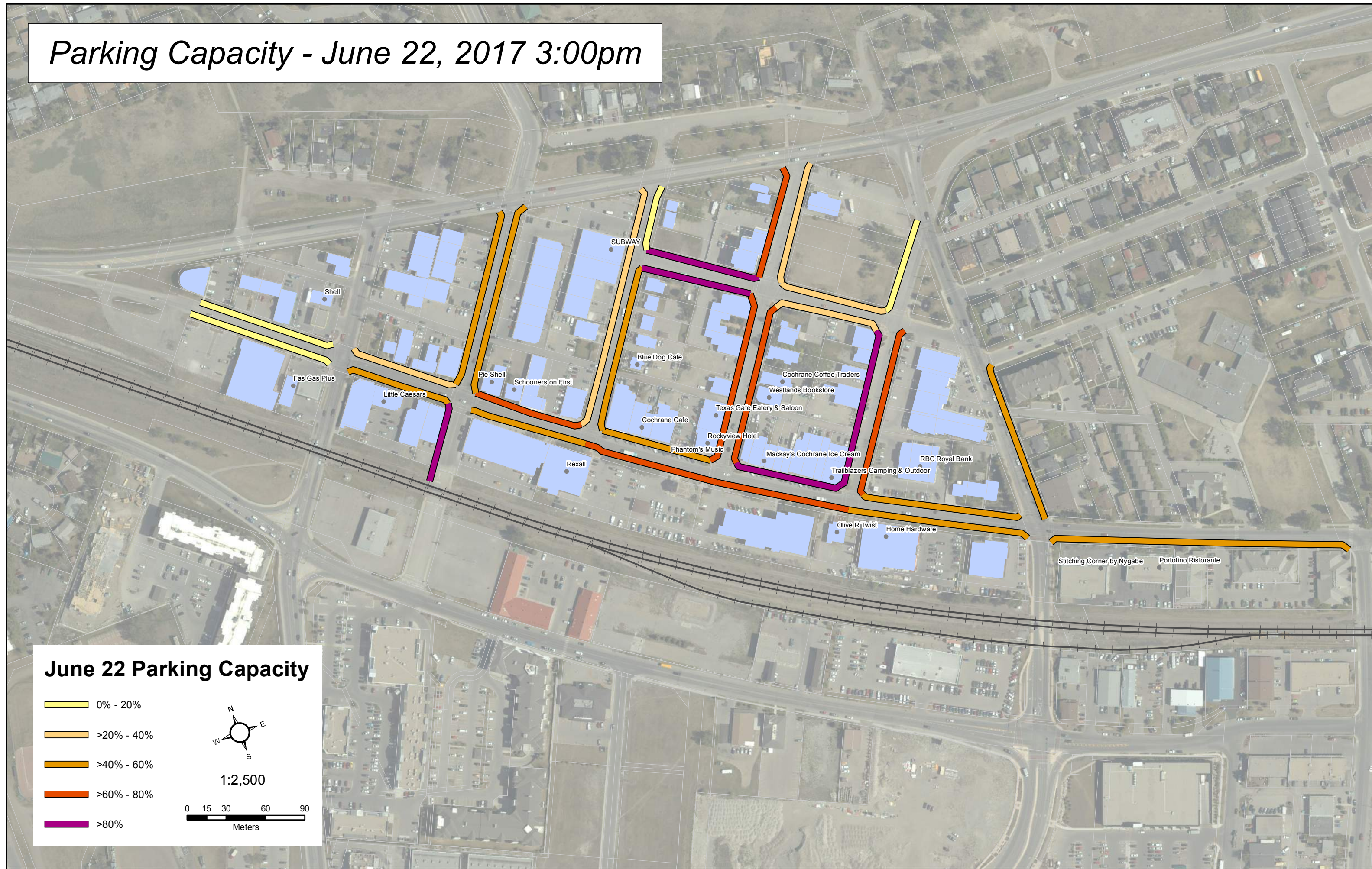


June 22 Parking Capacity

- 0% - 20%
- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%

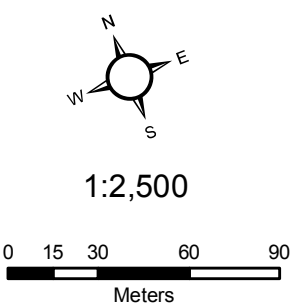


Parking Capacity - June 22, 2017 3:00pm

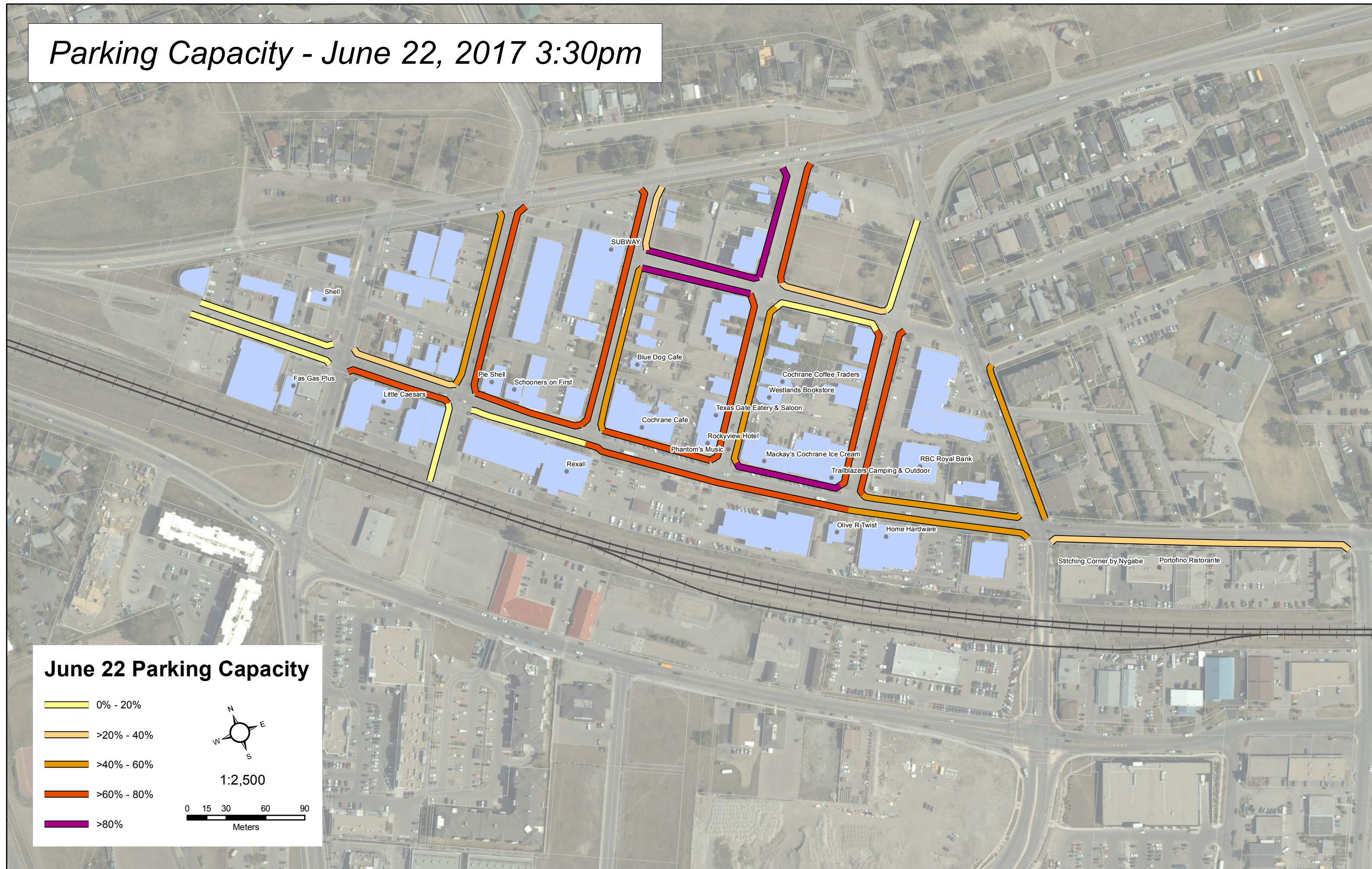


June 22 Parking Capacity

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- >40% - 60%
- >60% - 80%
- >80%

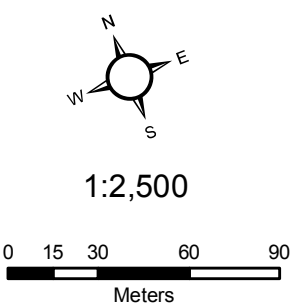


Parking Capacity - June 22, 2017 3:30pm

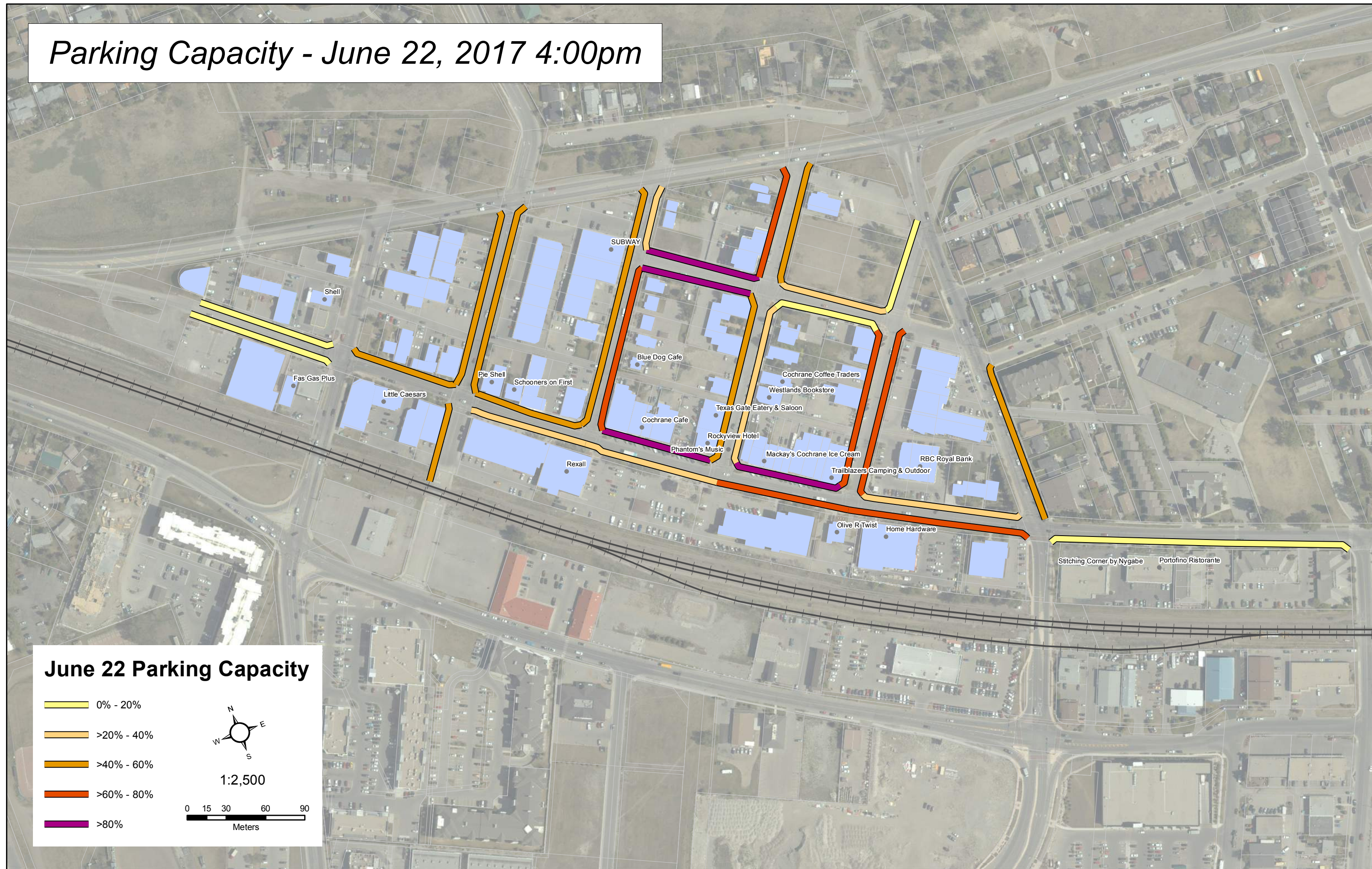


June 22 Parking Capacity

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- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%

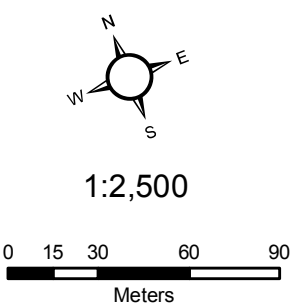


Parking Capacity - June 22, 2017 4:00pm

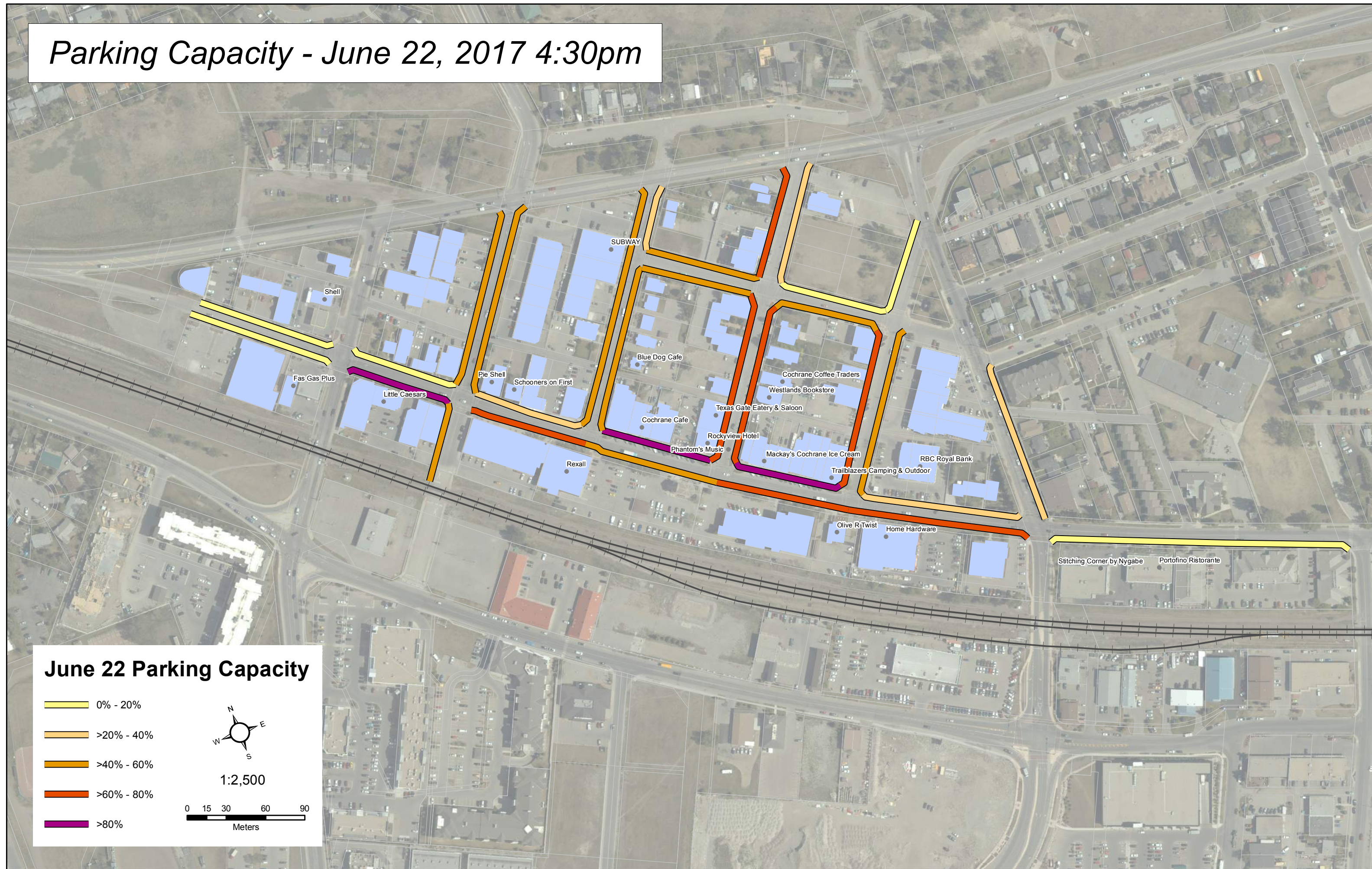


June 22 Parking Capacity

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- >20% - 40%
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- >60% - 80%
- >80%

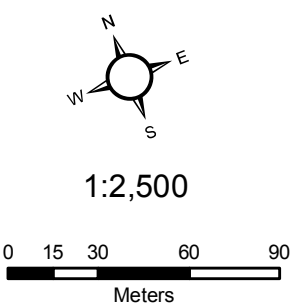


Parking Capacity - June 22, 2017 4:30pm

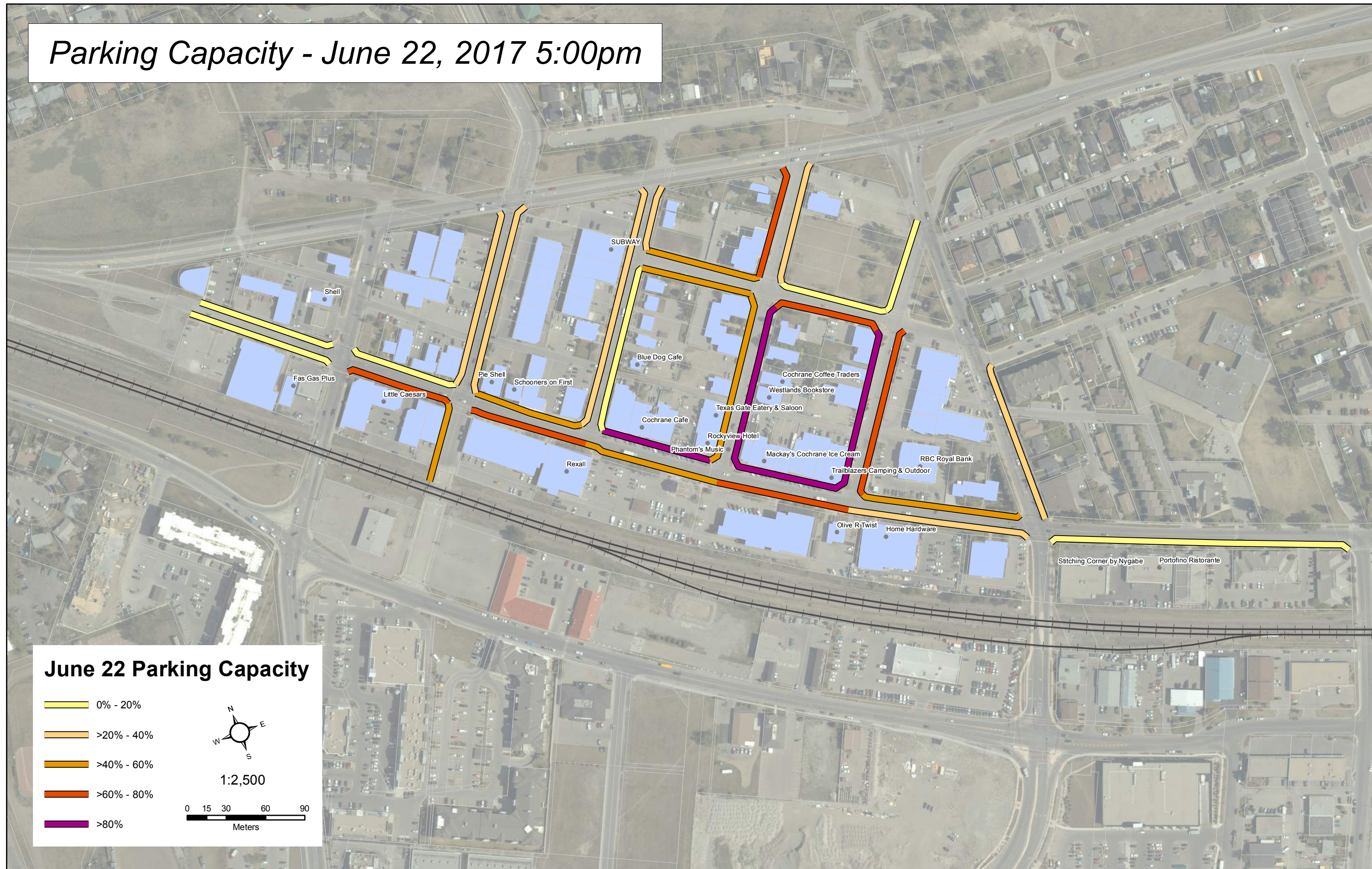


June 22 Parking Capacity

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- >20% - 40%
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- >60% - 80%
- >80%

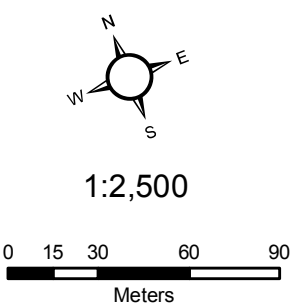


Parking Capacity - June 22, 2017 5:00pm

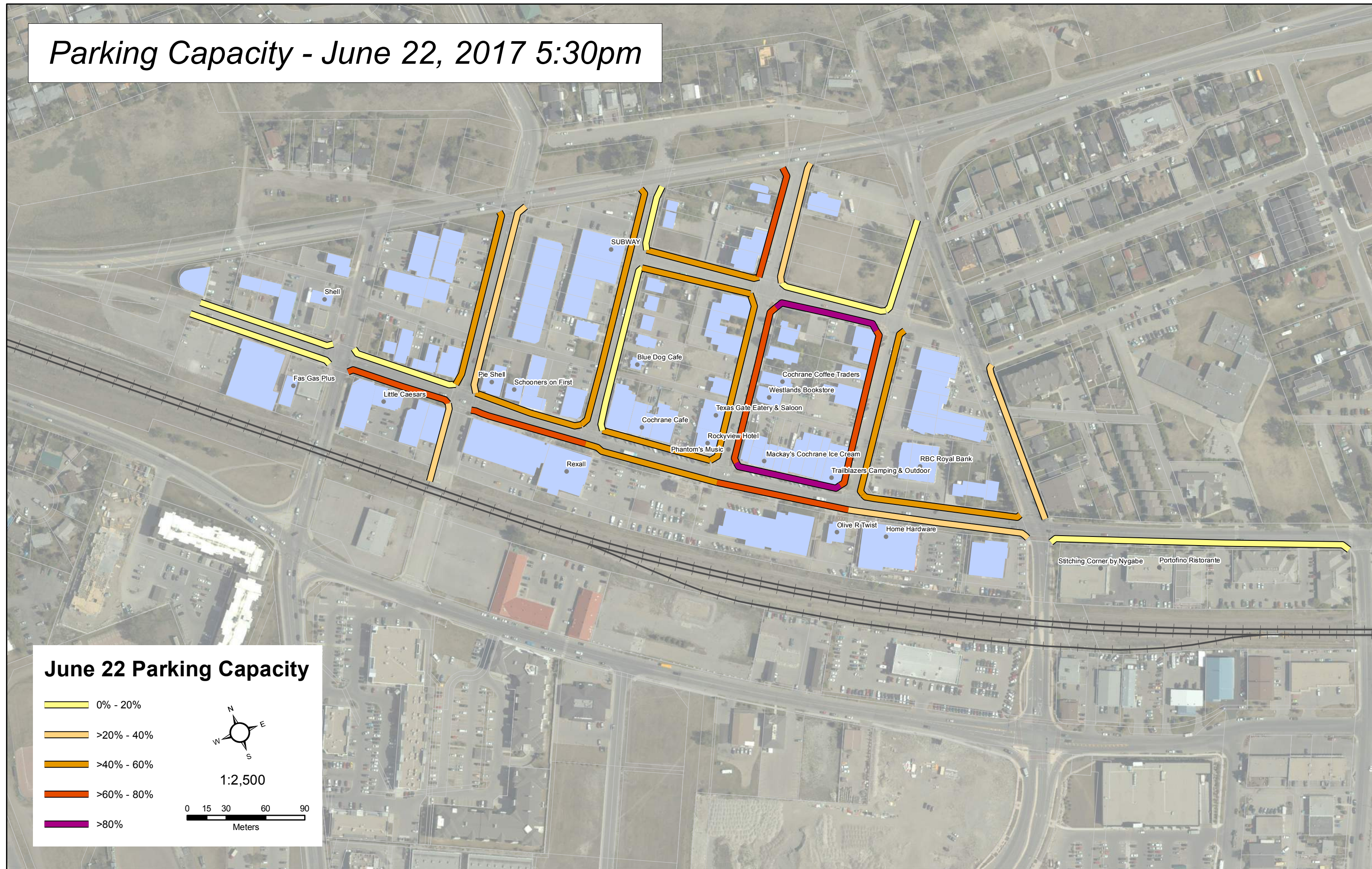


June 22 Parking Capacity

- 0% - 20%
- >20% - 40%
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- >80%

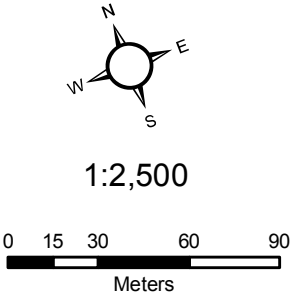


Parking Capacity - June 22, 2017 5:30pm

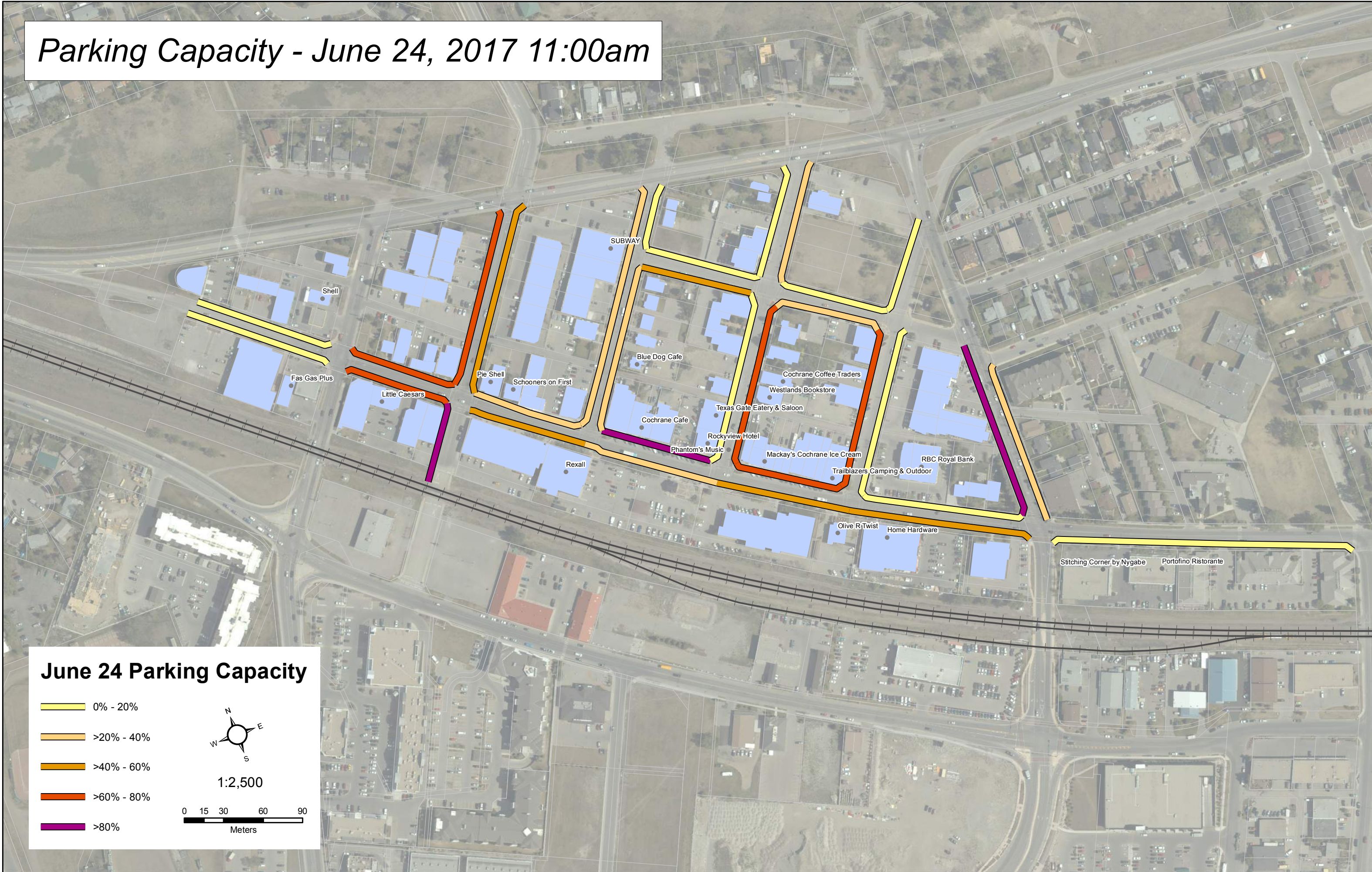


June 22 Parking Capacity

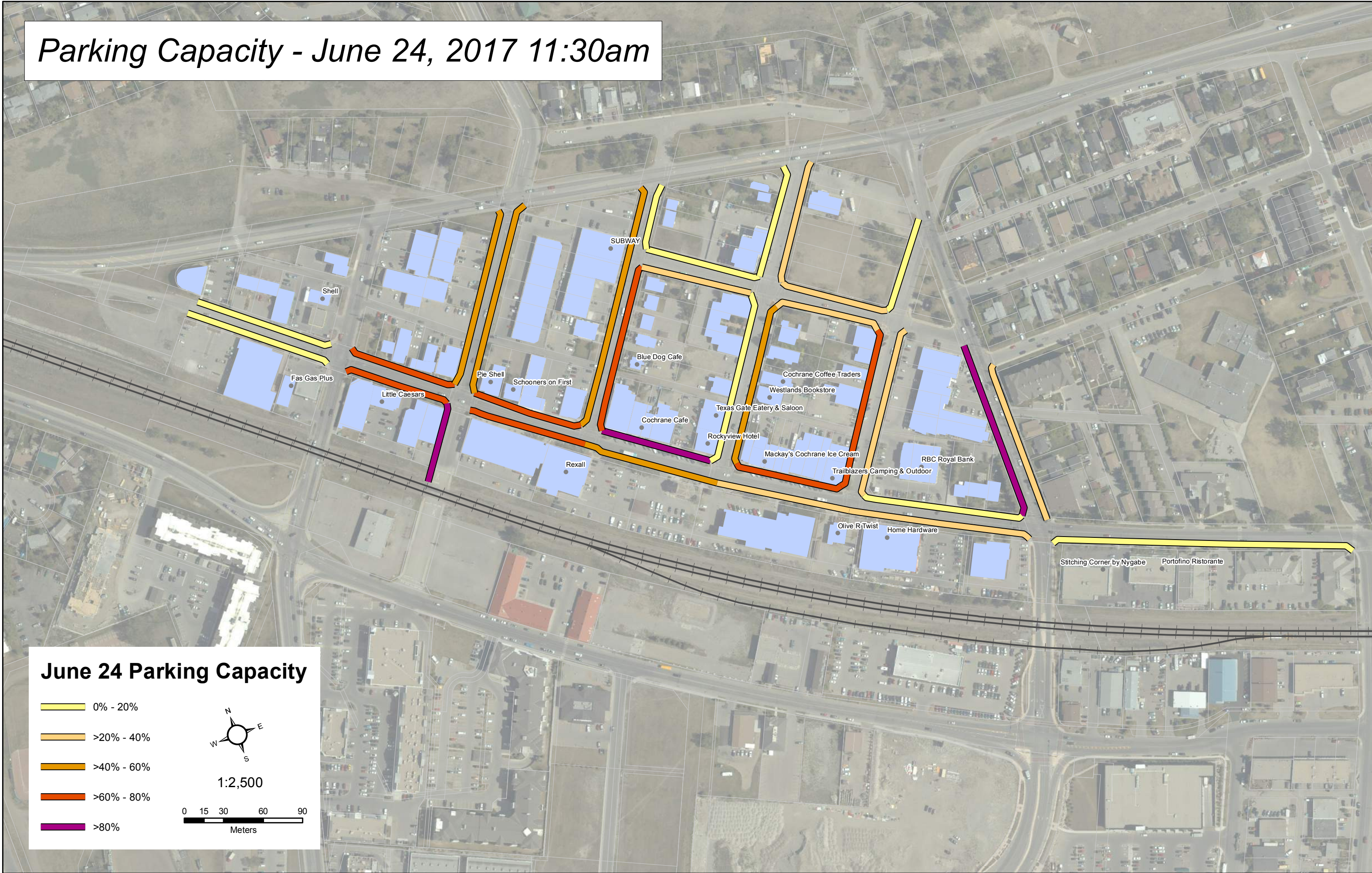
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- >60% - 80%
- >80%



Parking Capacity - June 24, 2017 11:00am

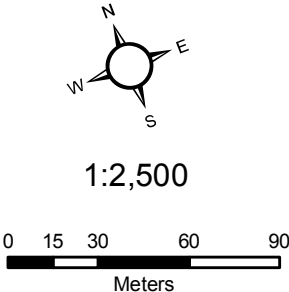


Parking Capacity - June 24, 2017 11:30am

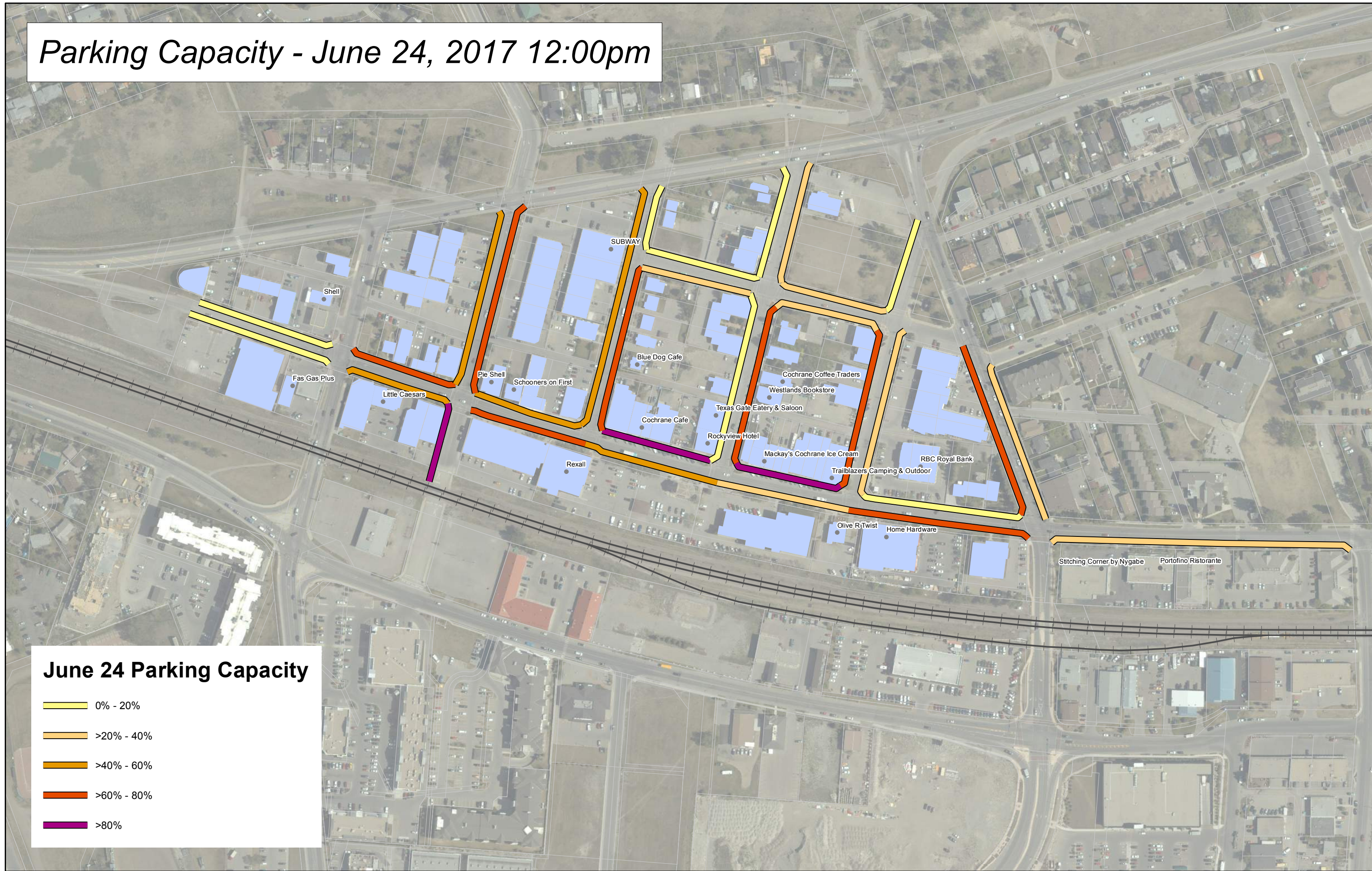


June 24 Parking Capacity

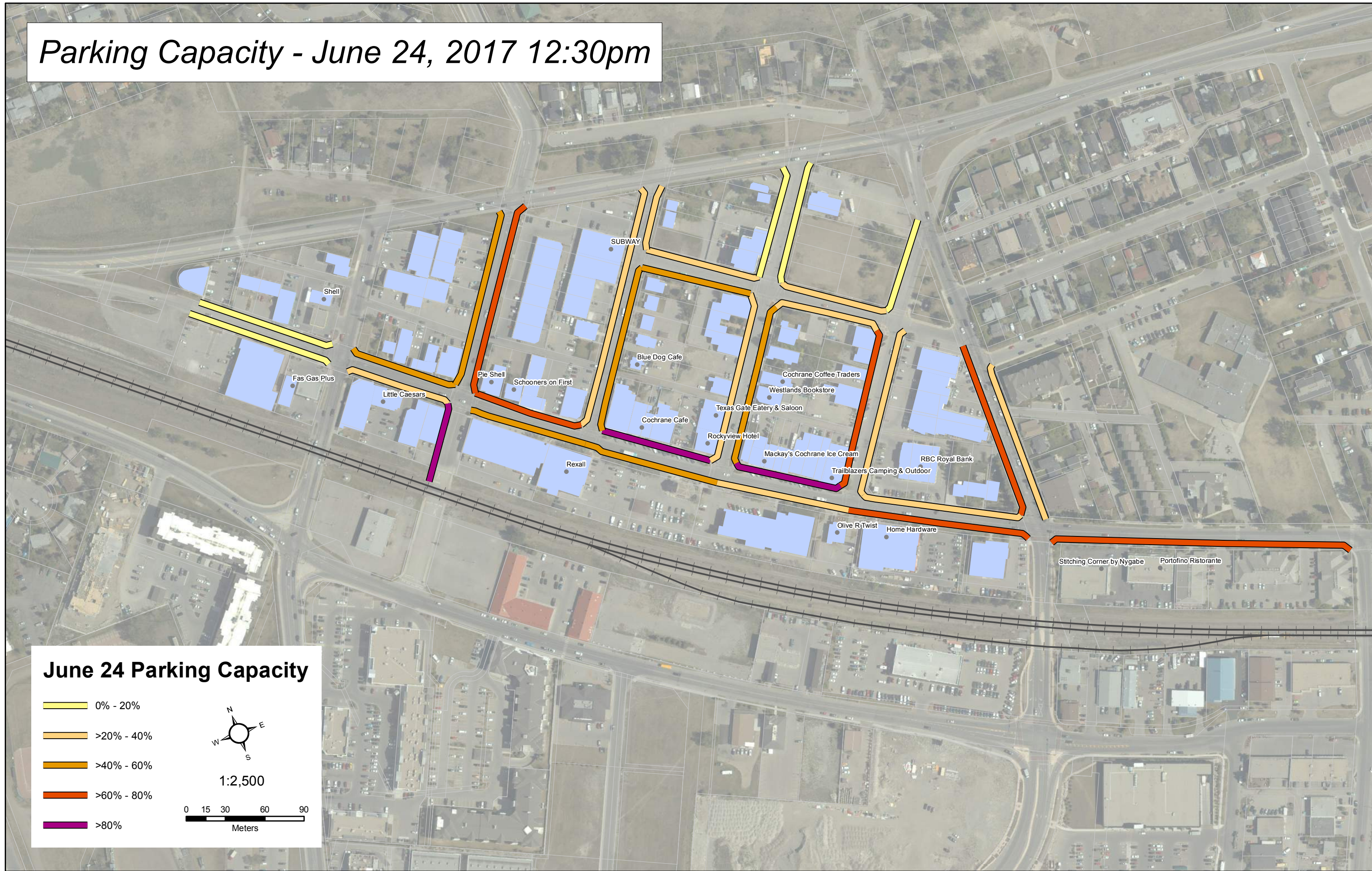
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- >80%



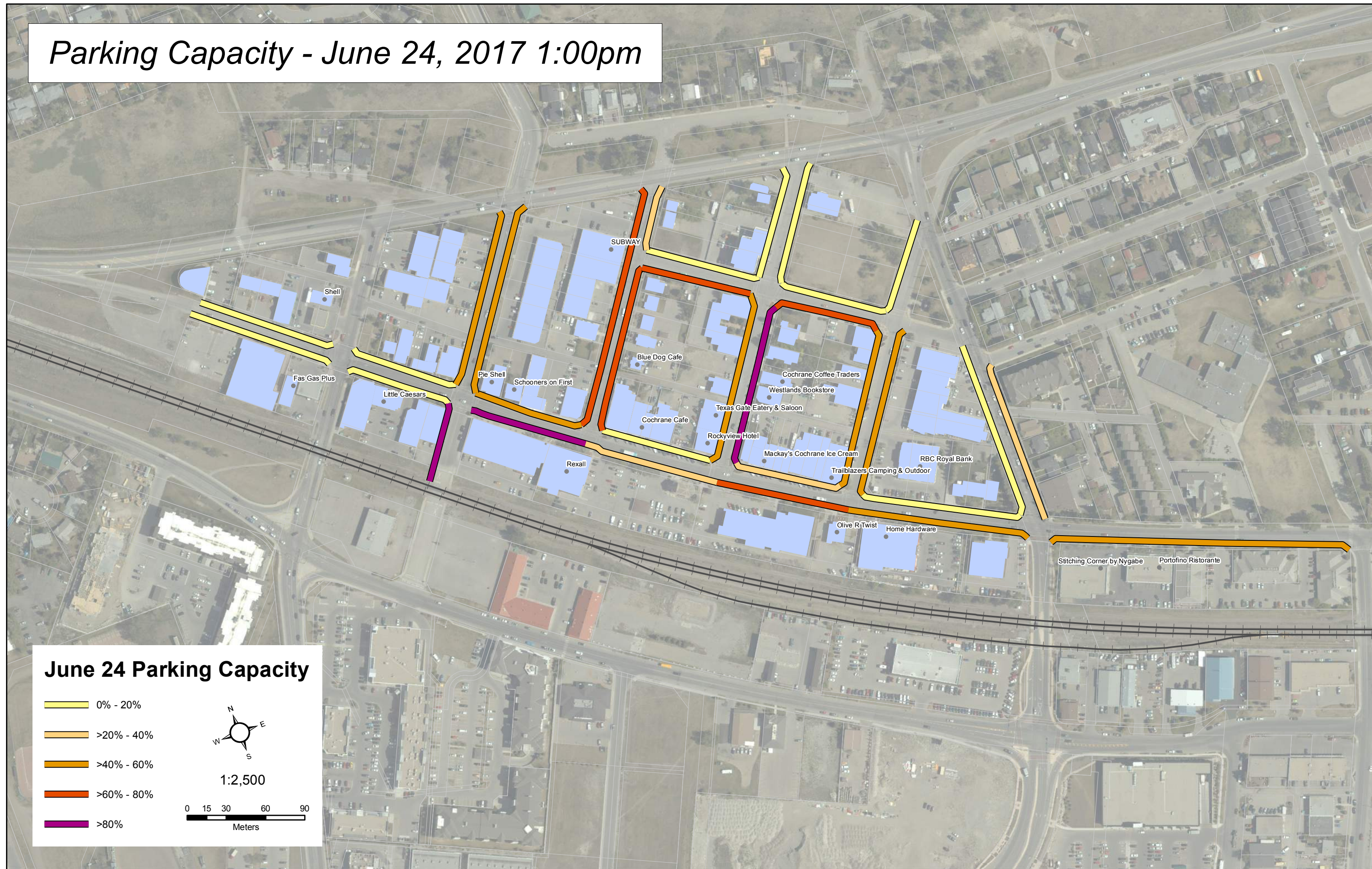
Parking Capacity - June 24, 2017 12:00pm



Parking Capacity - June 24, 2017 12:30pm

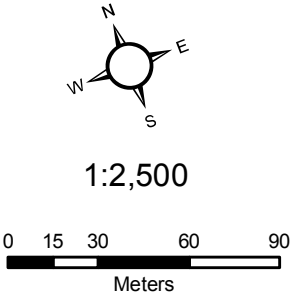


Parking Capacity - June 24, 2017 1:00pm

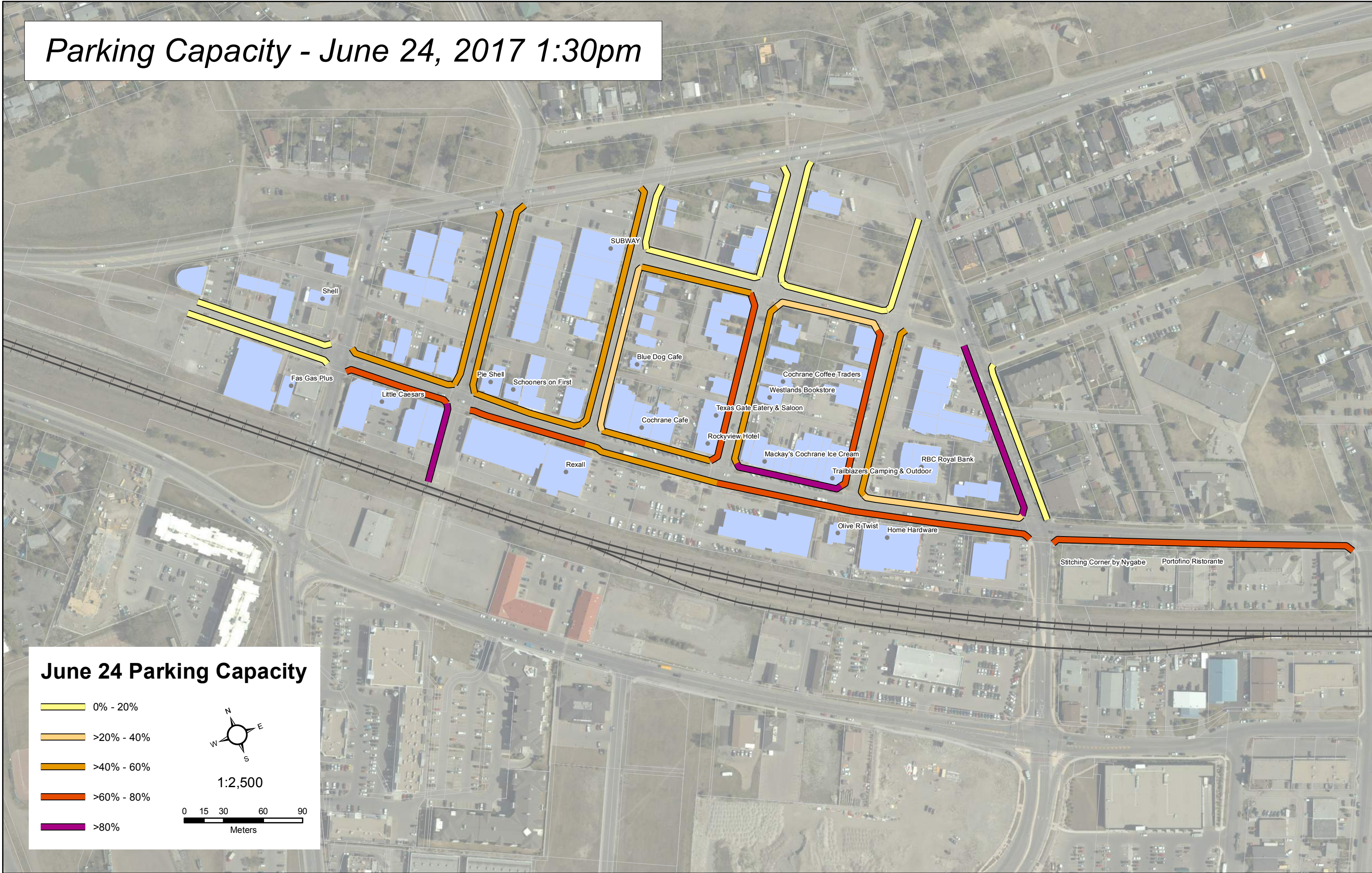


June 24 Parking Capacity

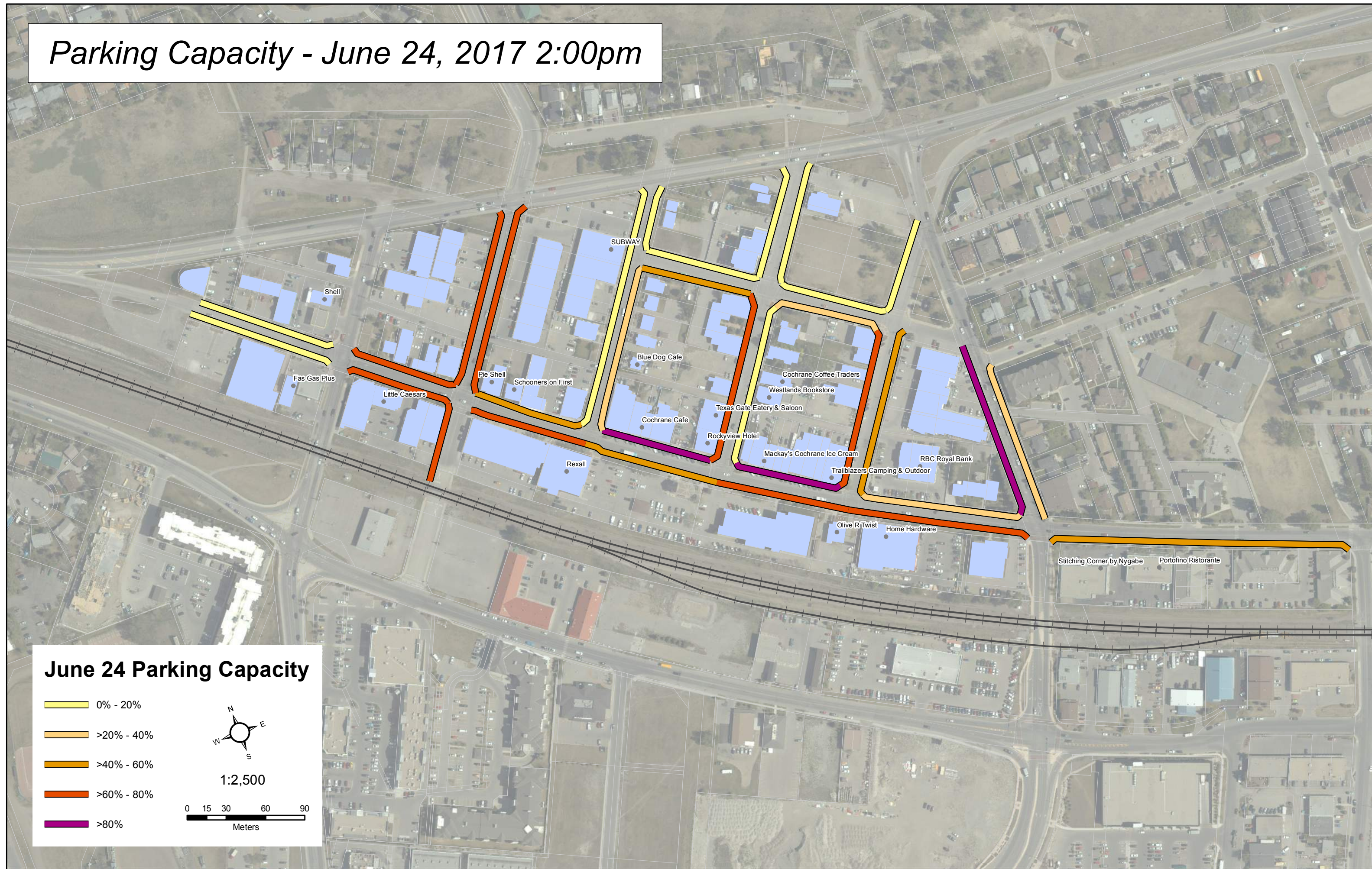
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- >40% - 60%
- >60% - 80%
- >80%



Parking Capacity - June 24, 2017 1:30pm

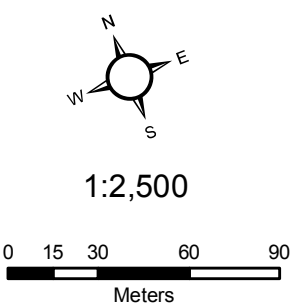


Parking Capacity - June 24, 2017 2:00pm

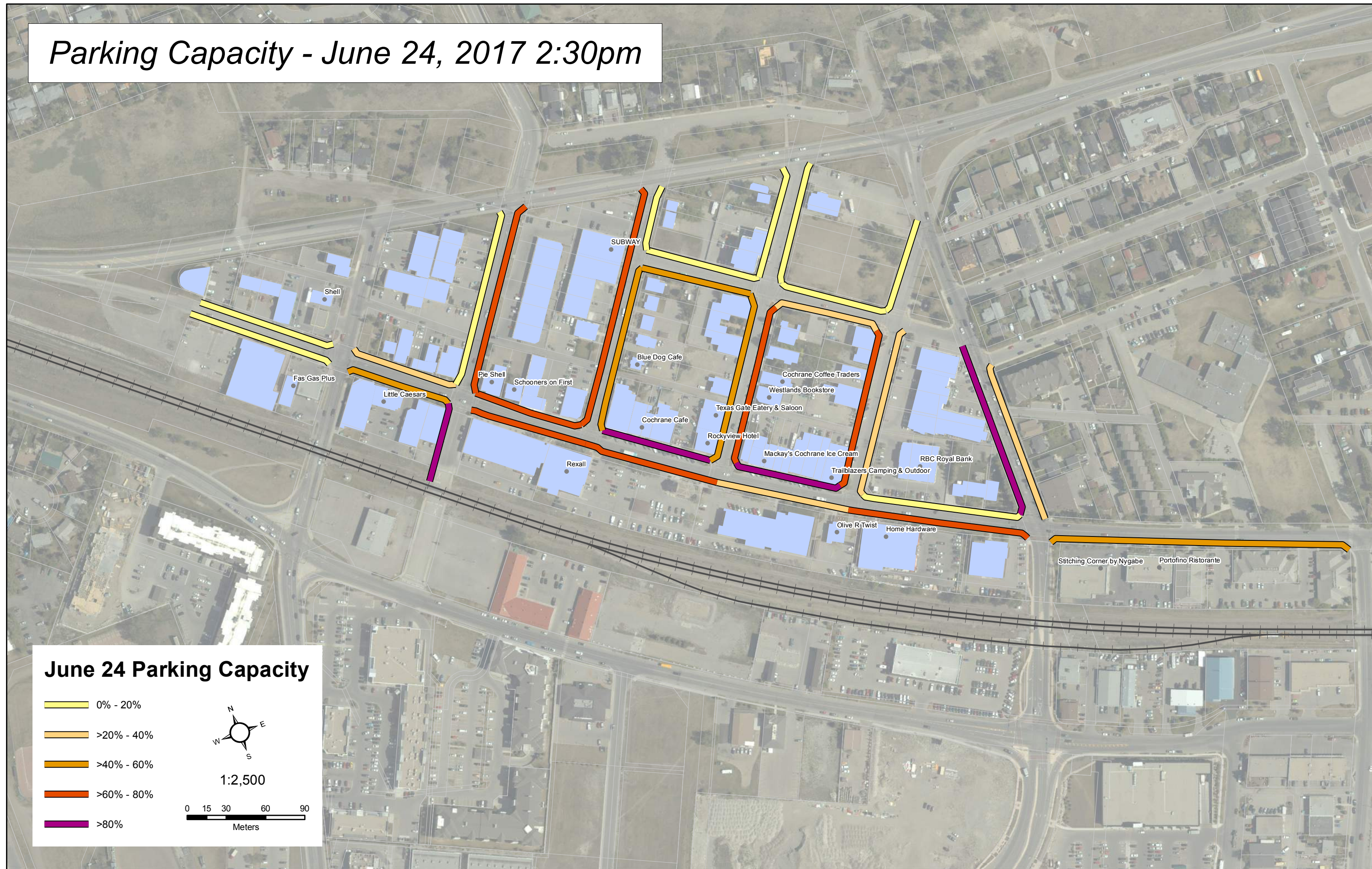


June 24 Parking Capacity

- 0% - 20%
- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%

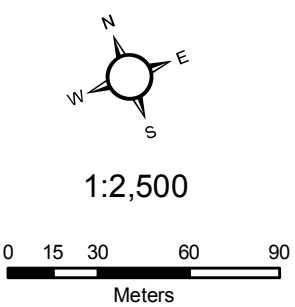


Parking Capacity - June 24, 2017 2:30pm

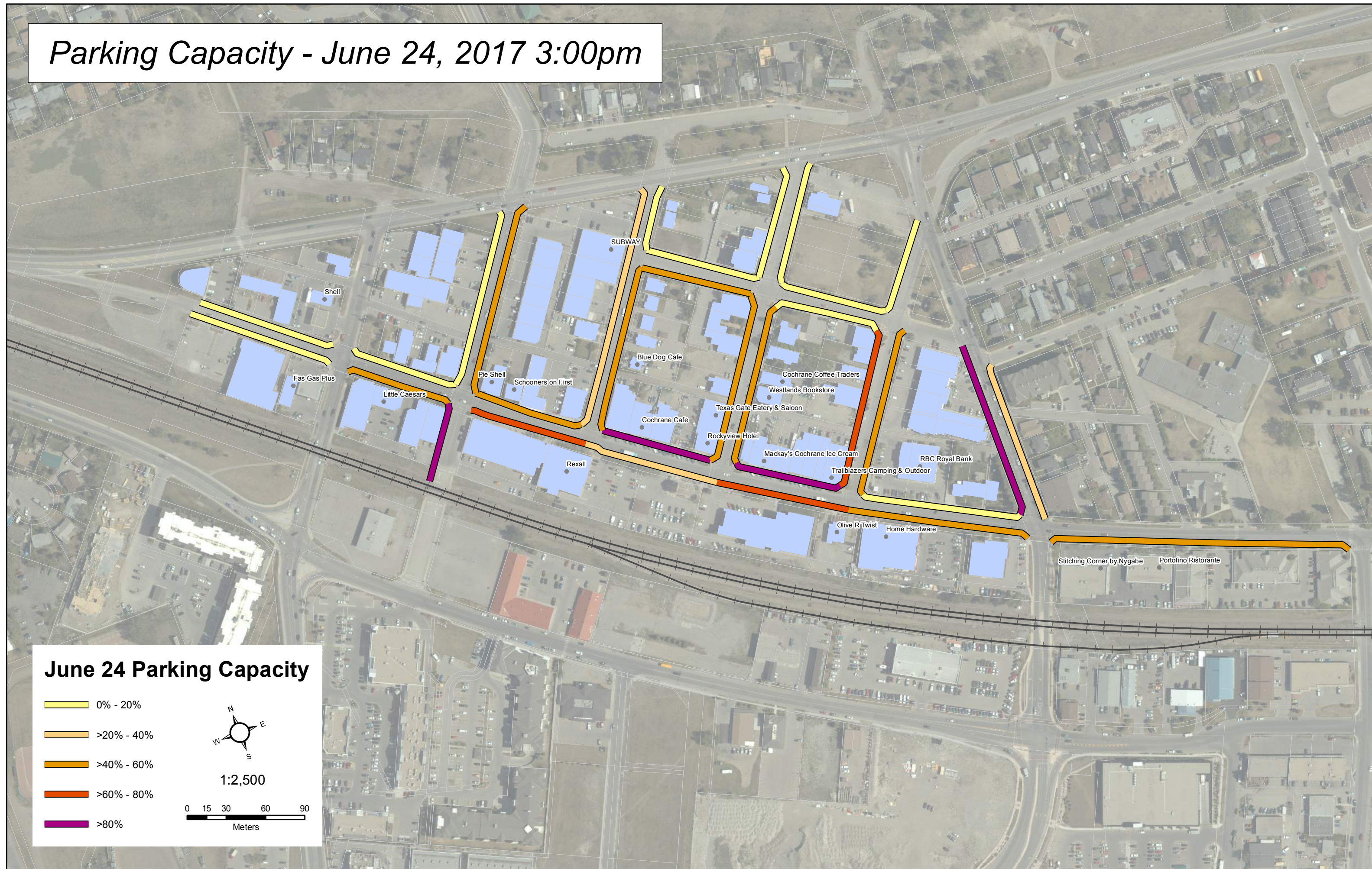


June 24 Parking Capacity

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- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%

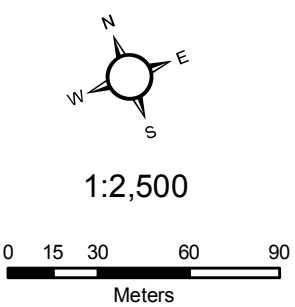


Parking Capacity - June 24, 2017 3:00pm

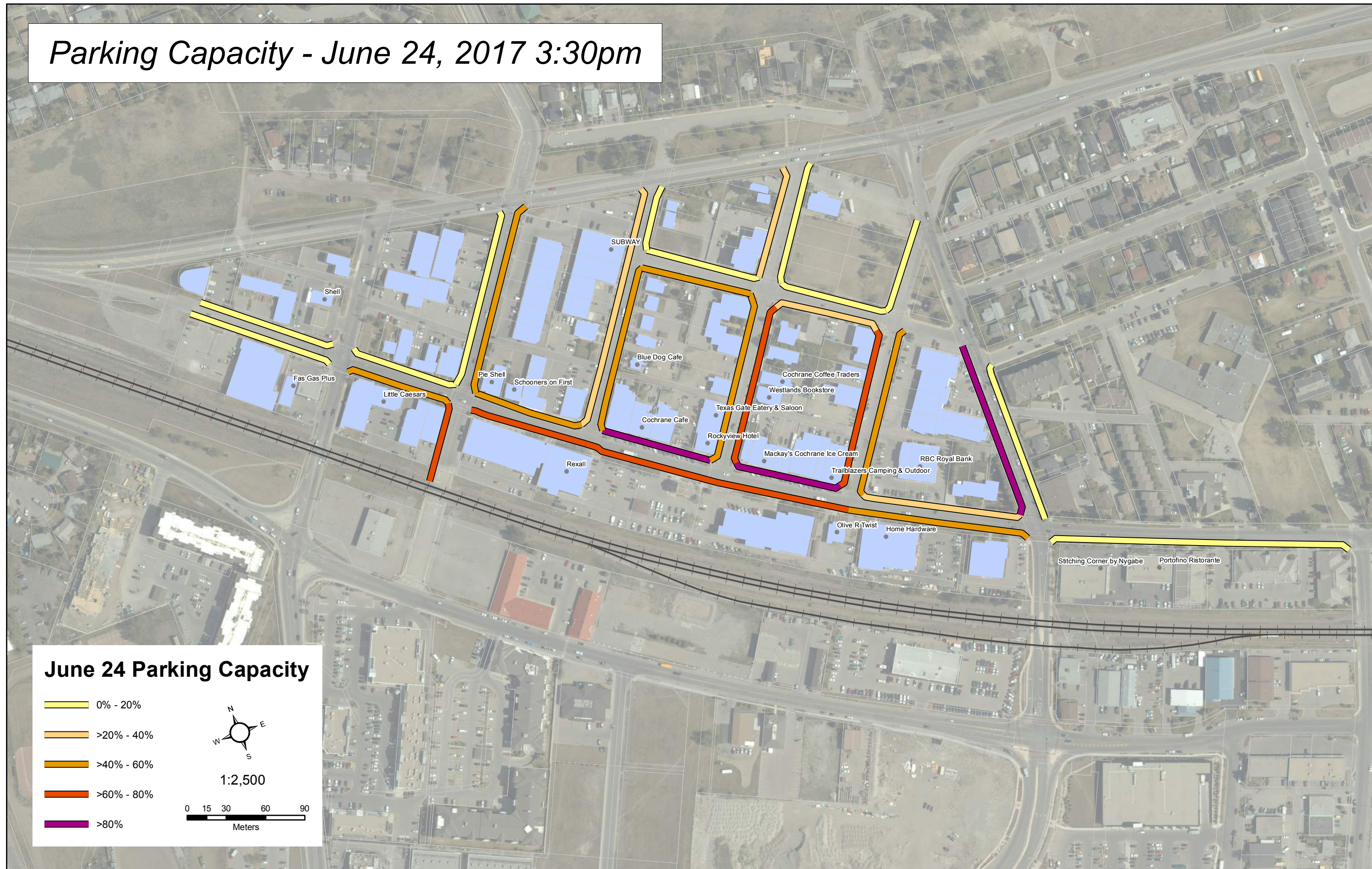


June 24 Parking Capacity

- 0% - 20%
- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%

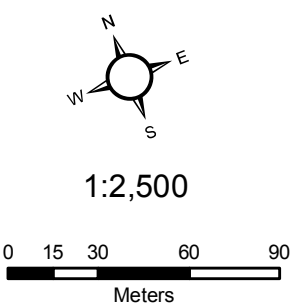


Parking Capacity - June 24, 2017 3:30pm

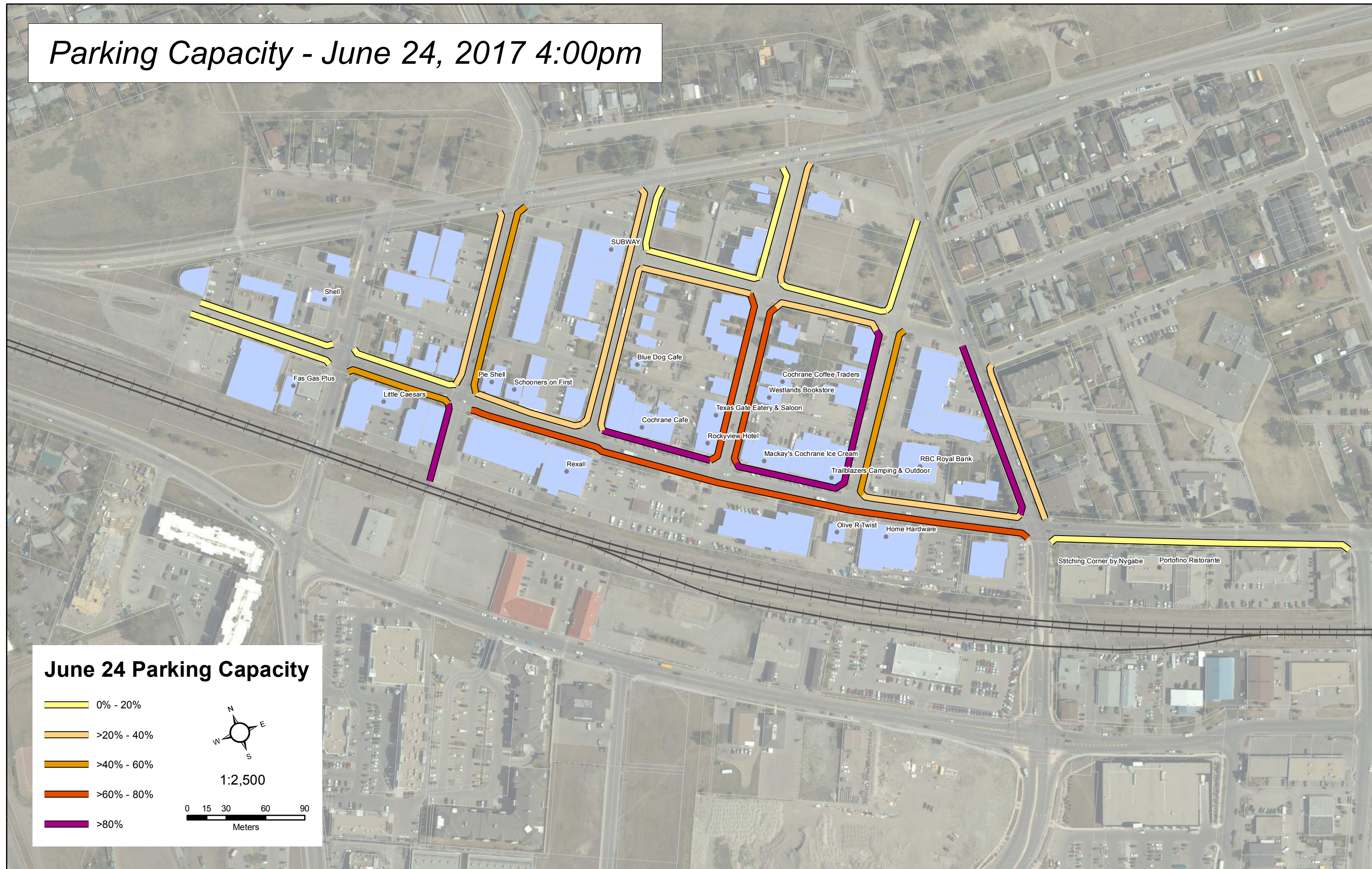


June 24 Parking Capacity

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- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%

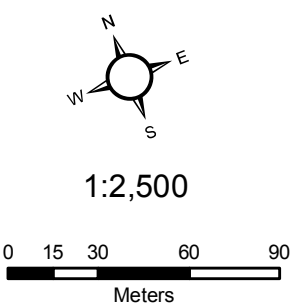


Parking Capacity - June 24, 2017 4:00pm

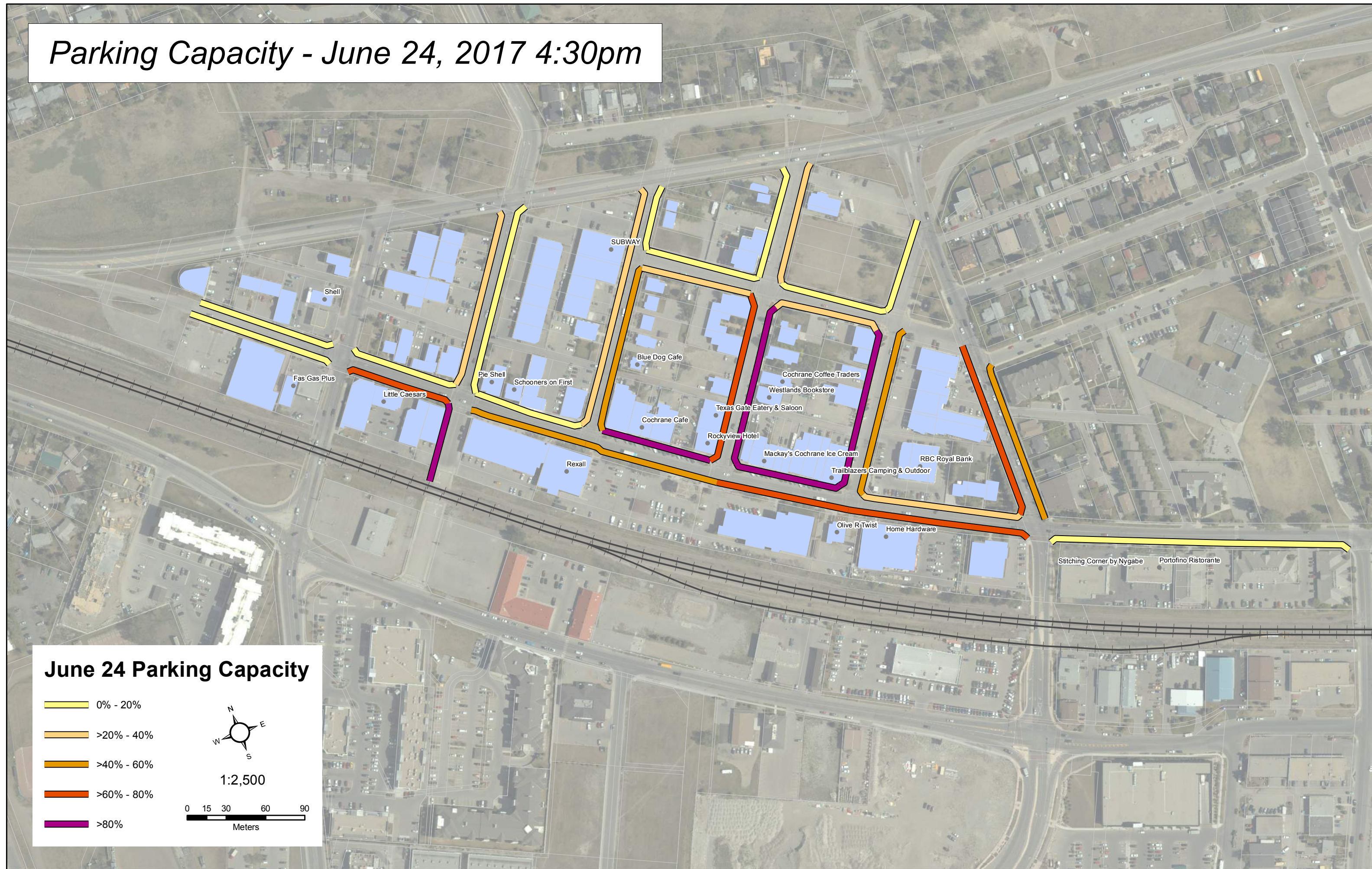


June 24 Parking Capacity

- 0% - 20%
- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%

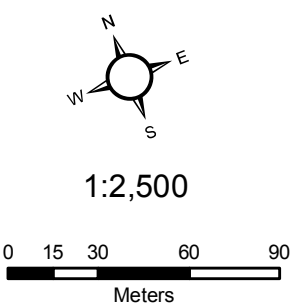


Parking Capacity - June 24, 2017 4:30pm

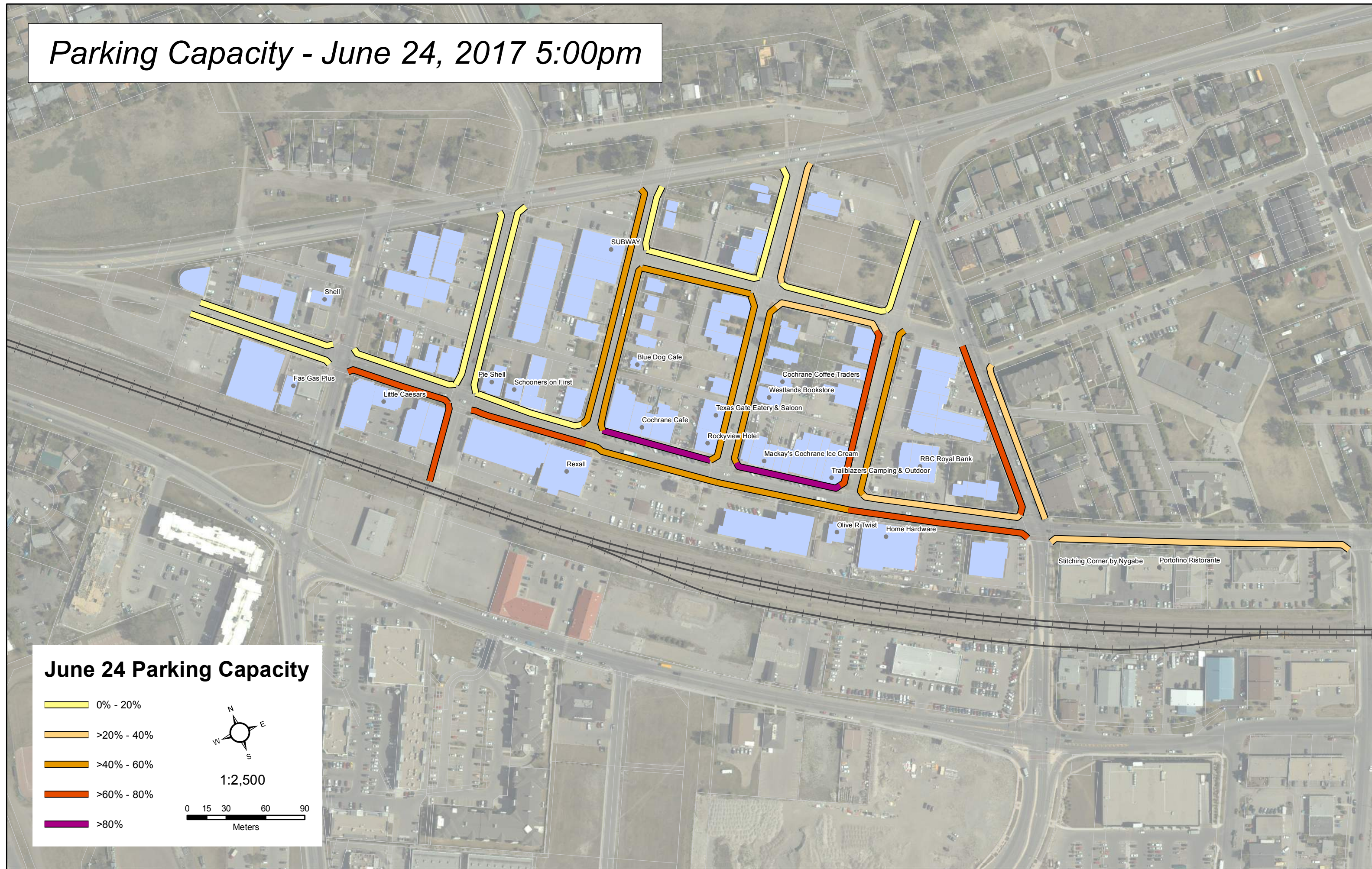


June 24 Parking Capacity

- 0% - 20%
- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%

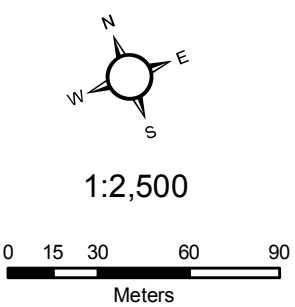


Parking Capacity - June 24, 2017 5:00pm

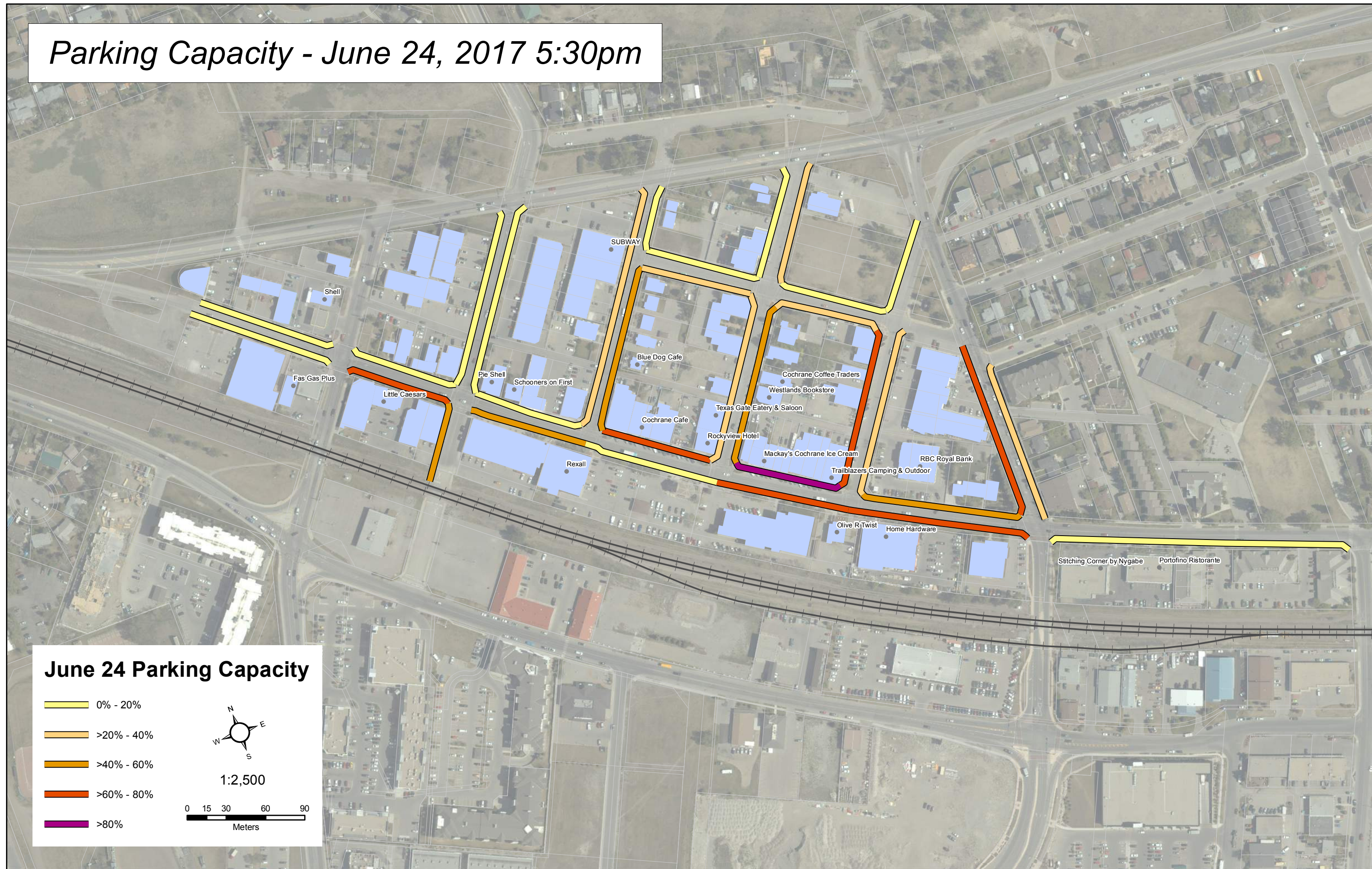


June 24 Parking Capacity

- 0% - 20%
- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%

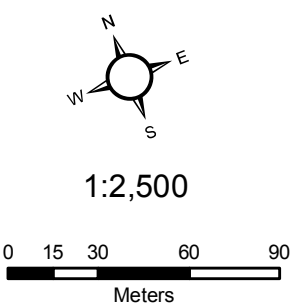


Parking Capacity - June 24, 2017 5:30pm



June 24 Parking Capacity

- 0% - 20%
- >20% - 40%
- >40% - 60%
- >60% - 80%
- >80%



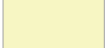




Appendix B – South Downtown Demand

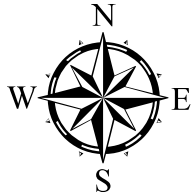
Cochrane Parking Assessment

Phase 2 Capacity - 11:00am

August 3, 2017

Capacity

	0 - 20%
	20 - 40%
	40 - 60%
	60 - 80%
	> 80%



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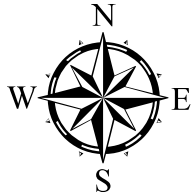
Cochrane Parking Assessment

Phase 2 Capacity - 11:30am

August 3, 2017

Capacity

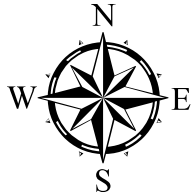
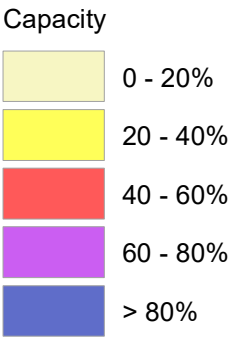
	0 - 20%
	20 - 40%
	40 - 60%
	60 - 80%
	> 80%



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Cochrane Parking Assessment
Phase 2 Capacity - 12:00pm
August 3, 2017



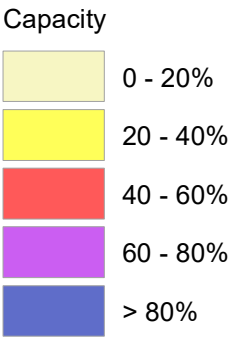
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Cochrane Parking Assessment

Phase 2 Capacity - 12:30pm

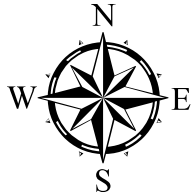
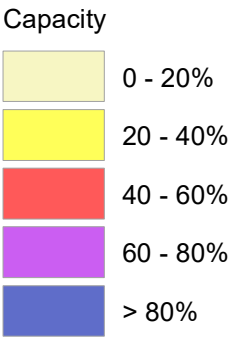
August 3, 2017



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Cochrane Parking Assessment
Phase 2 Capacity - 1:00pm
August 3, 2017



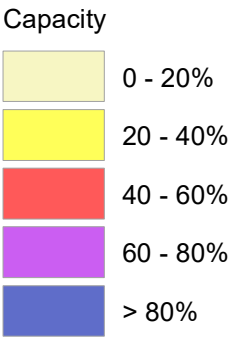
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Cochrane Parking Assessment

Phase 2 Capacity - 1:30pm

August 3, 2017



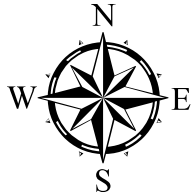
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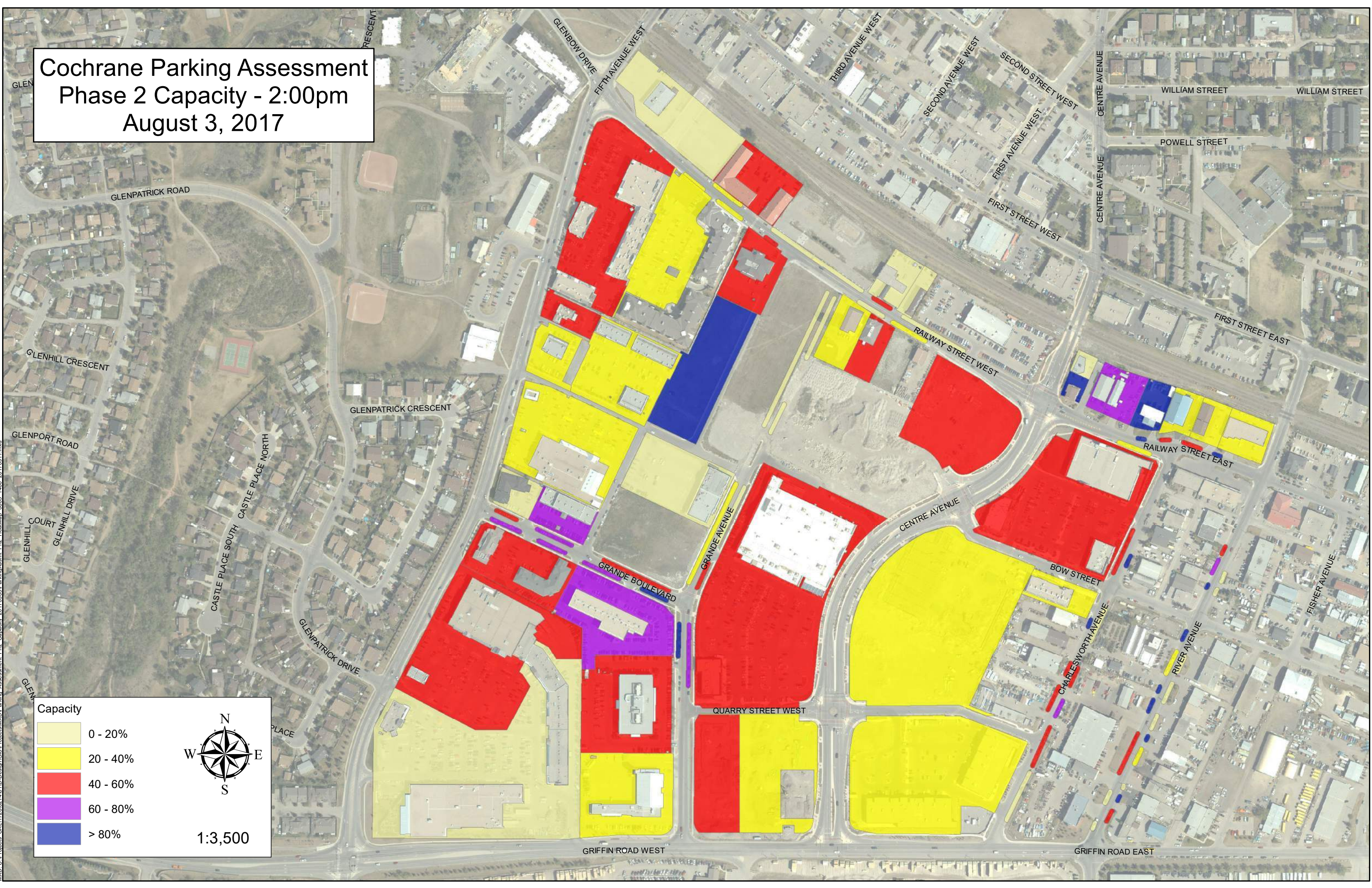
Cochrane Parking Assessment
Phase 2 Capacity - 2:00pm
August 3, 2017

Capacity

	0 - 20%
	20 - 40%
	40 - 60%
	60 - 80%
	> 80%



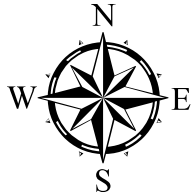
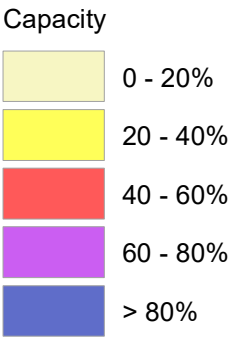
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Cochrane Parking Assessment

Phase 2 Capacity - 2:30pm

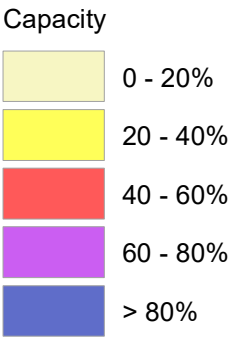
August 3, 2017



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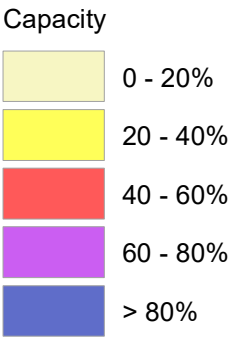
Cochrane Parking Assessment
Phase 2 Capacity - 3:30pm
August 3, 2017



1:3,500

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Cochrane Parking Assessment
Phase 2 Capacity - 4:00pm
August 3, 2017

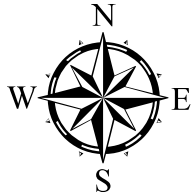


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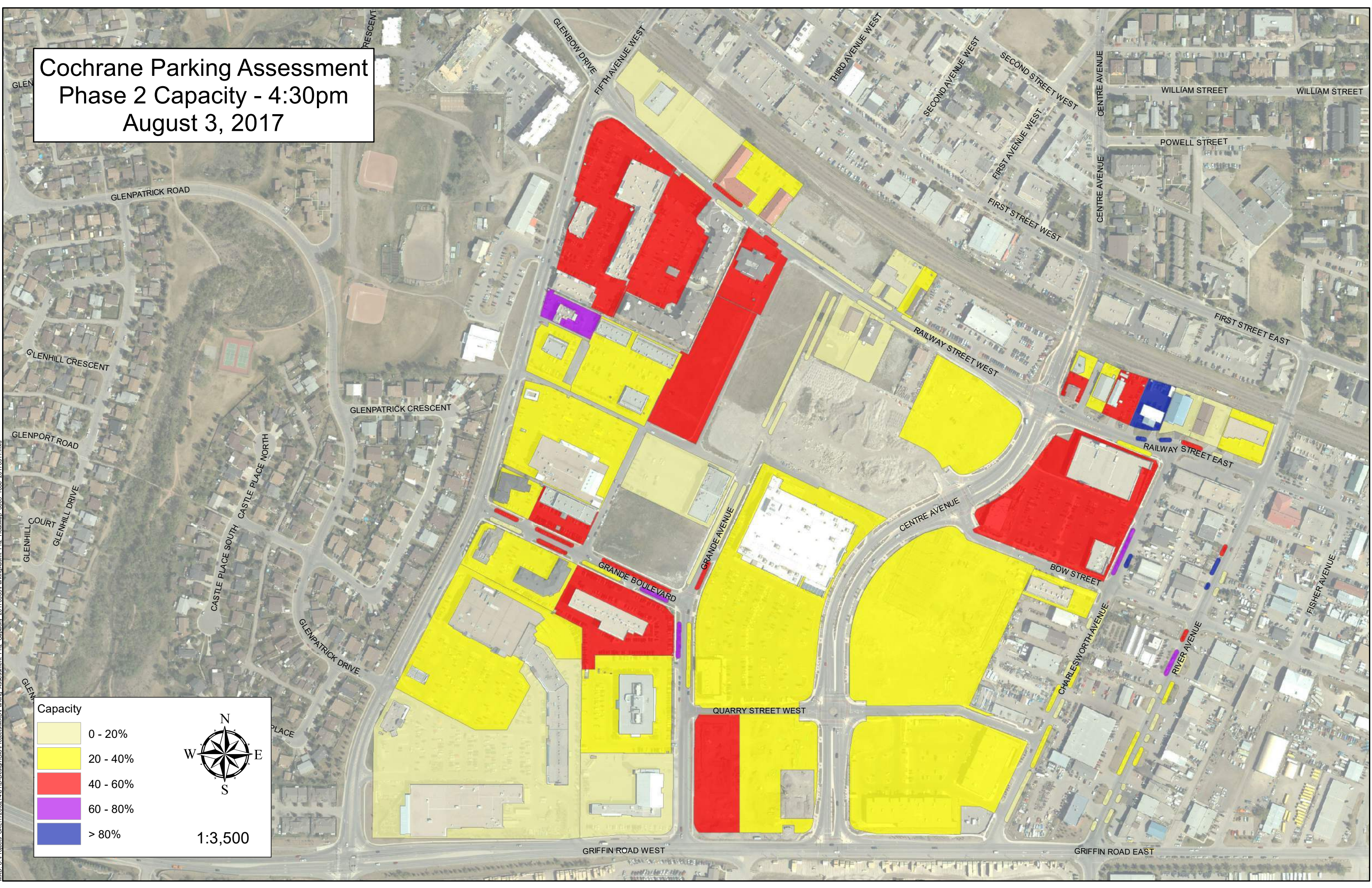
Cochrane Parking Assessment
Phase 2 Capacity - 4:30pm
August 3, 2017

Capacity

	0 - 20%
	20 - 40%
	40 - 60%
	60 - 80%
	> 80%



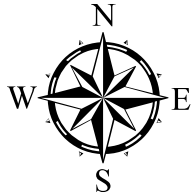
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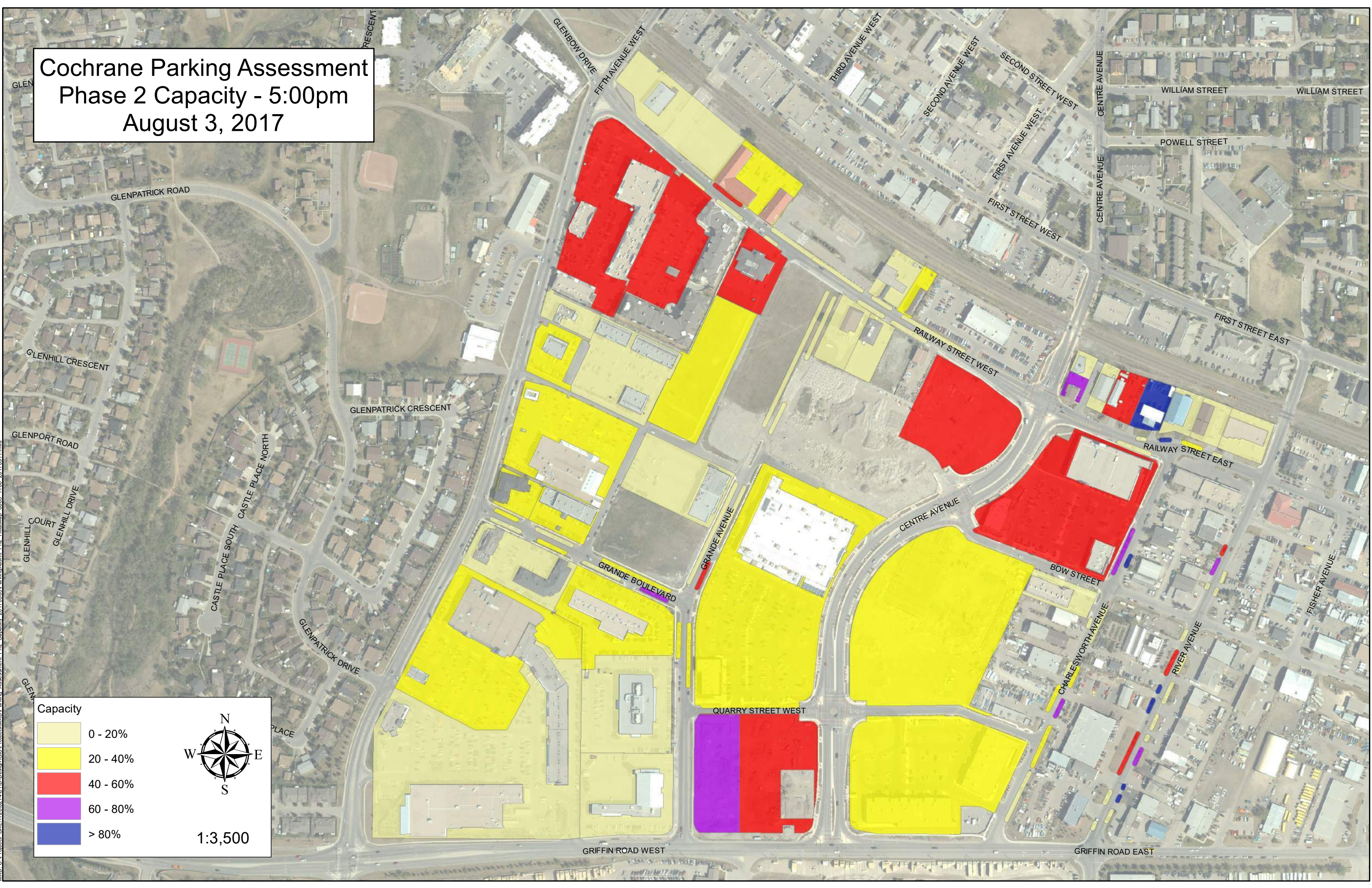
Cochrane Parking Assessment
Phase 2 Capacity - 5:00pm
August 3, 2017

Capacity

	0 - 20%
	20 - 40%
	40 - 60%
	60 - 80%
	> 80%



1:3,500

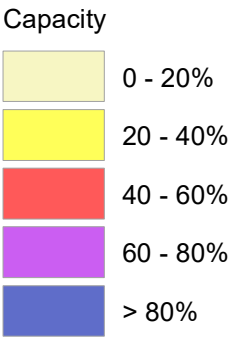


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Cochrane Parking Assessment

Phase 2 Capacity - 5:30pm

August 3, 2017



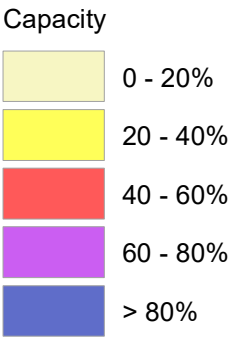
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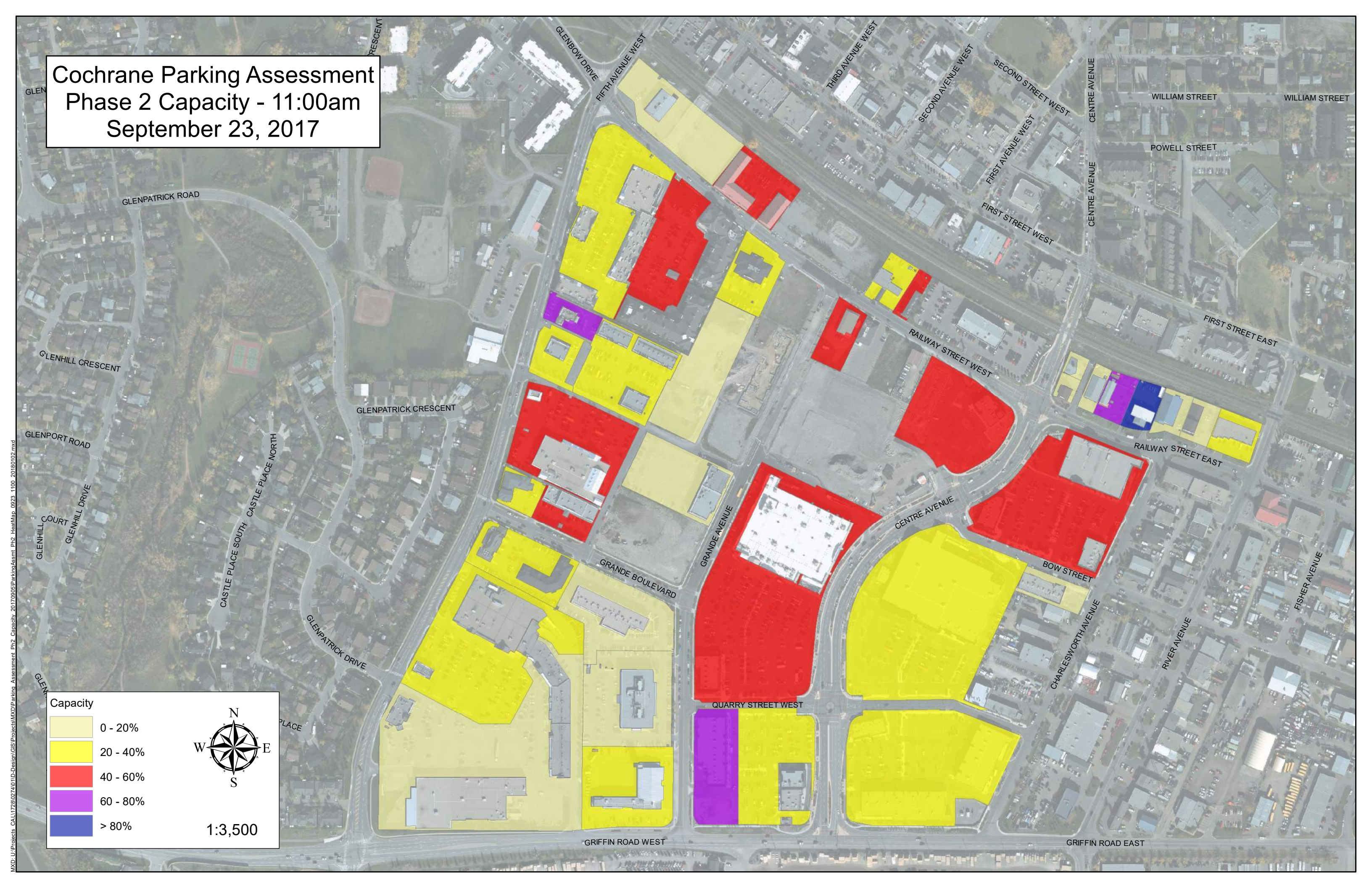
Cochrane Parking Assessment

Phase 2 Capacity - 11:00am

September 23, 2017



1:3,500



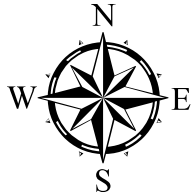
Cochrane Parking Assessment

Phase 2 Capacity - 11:30am

September 23, 2017

Capacity

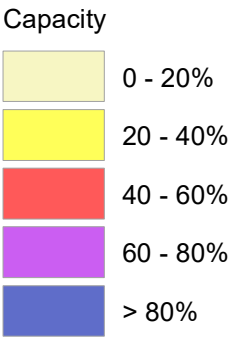
0 - 20%
20 - 40%
40 - 60%
60 - 80%
> 80%



1:3,500

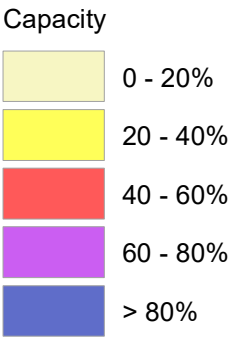
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Cochrane Parking Assessment
Phase 2 Capacity - 12:15pm
September 23, 2017



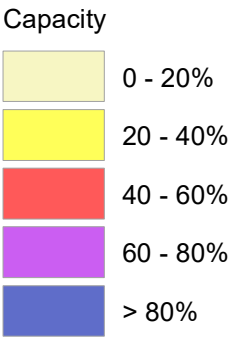
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Cochrane Parking Assessment
Phase 2 Capacity - 1:00pm
September 23, 2017

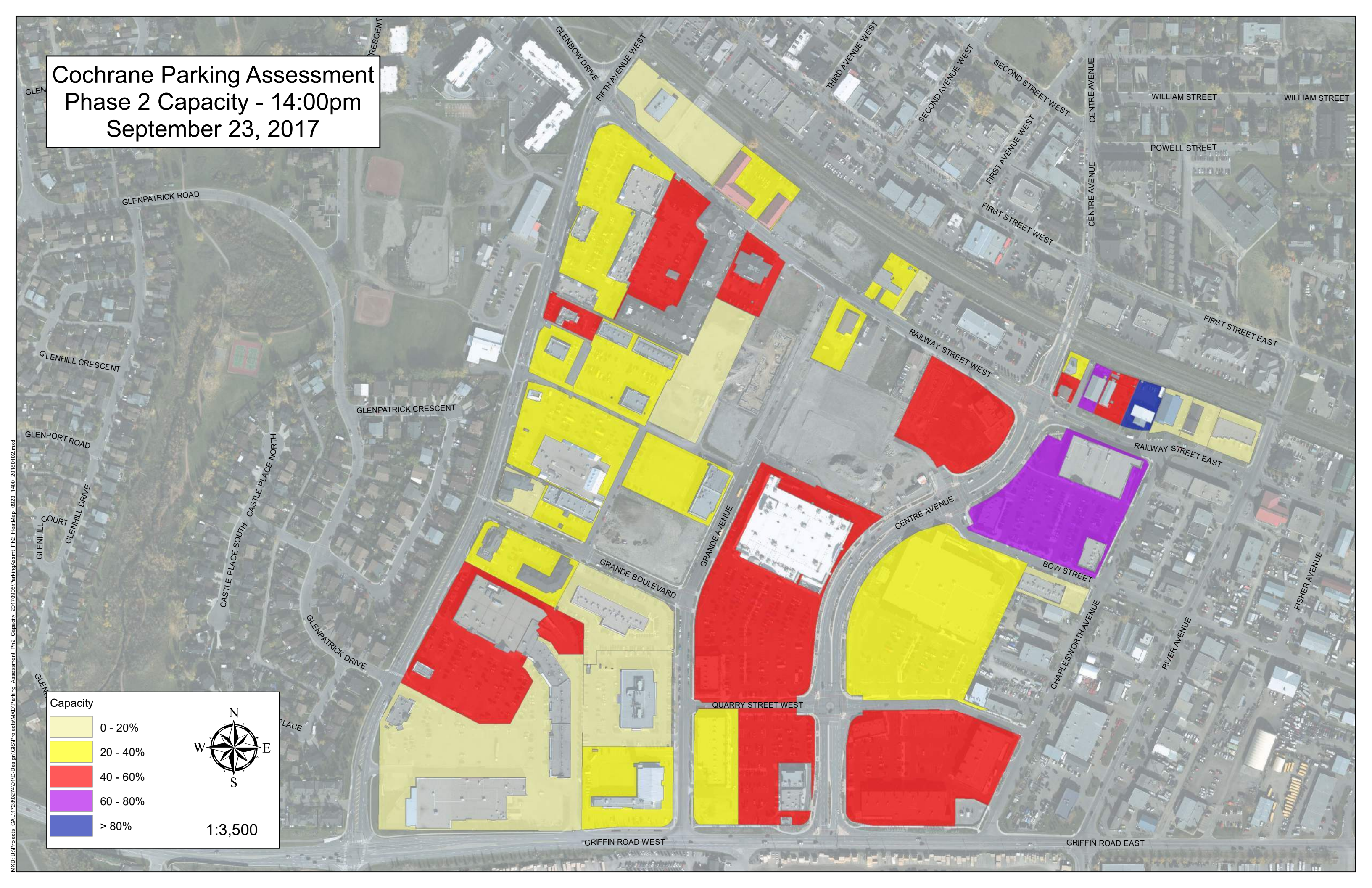


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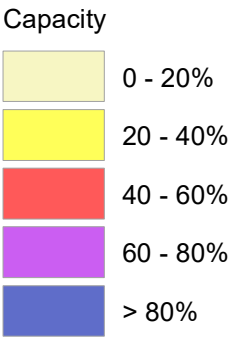
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Phase 2 Capacity - 14:00pm
September 23, 2017



1:3,500



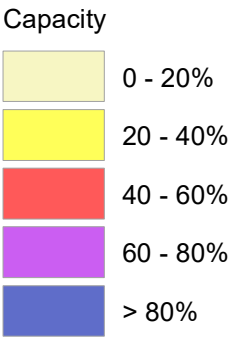
Cochrane Parking Assessment
Phase 2 Capacity - 15:00pm
September 23, 2017



1:3,500

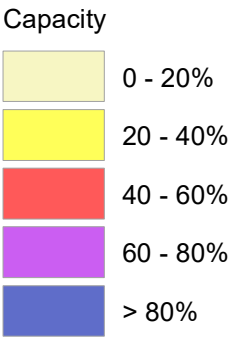
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Cochrane Parking Assessment
Phase 2 Capacity - 15:30pm
September 23, 2017



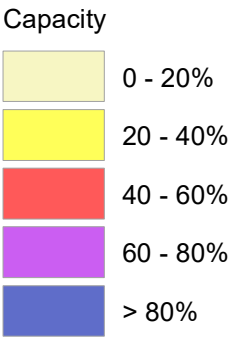
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Cochrane Parking Assessment
Phase 2 Capacity - 16:00pm
September 23, 2017



1:3,500

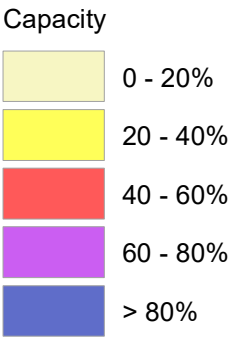
Cochrane Parking Assessment
Phase 2 Capacity - 16:30pm
September 23, 2017



1:3,500

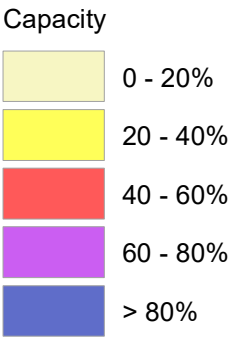
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Cochrane Parking Assessment
Phase 2 Capacity - 17:00pm
September 23, 2017



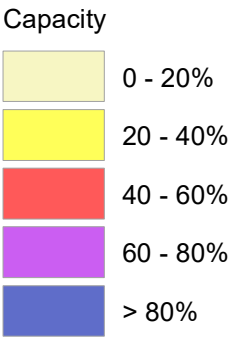
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Cochrane Parking Assessment
Phase 2 Capacity - 17:30pm
September 23, 2017



1:3,500

Cochrane Parking Assessment
Phase 2 Capacity - 18:00pm
September 23, 2017



1:3,500

Appendix C - Private Parking Rate Comparison

Land Use & Stall Rates

Land Use Bylaw Parking Rates

USE OF BUILDING	Town of Cochrane	Fort Saskatchewan	City of Leduc	Spruce Grove	City of Airdrie	Okotoks
Commercial, Multi-Use Developments	4/93 m ² (4.3/100 m ²)	2/100 m ²		1/55 m ² GFA (1.8/100 m ²)	2.5/100 m ² GFA	1/37 m ² (2.7/100 m ²)
Beer Parlours, Cocktail Lounges	1/3 seats (1.33/4 seats)	1/4 seats + 1/100 m ² for staff with a 5 minimum	46/100 m ² of seating area		12/100 m ² seating area + 3 minimum for staff	
Eating Establishments	1.25/4 seats (indoors and outdoors)	1/4 seats + 1/100 m ² for staff with a 5 minimum	46/100 m ² of seating area	1/5 m ² (20/100 m ²) seating area + 1/2 employees	12/100 m ² seating area + 3 minimum for staff	
Industrial, Multi-Use Developments	2.2/93 m ² (2.4/100 m ²)	1/100 m ² or 3/ tenant or establishment	1/100 m ²	1/100 m ² GFA	1/staff + 5 visitor parking	1/56 m ² (1.8/100 m ²)
Offices	1/37 m ² (2.7/100 m ²)	2/100 m ²	1/35 m ² (2.9/100 m ²) GFA	: 1/45 m ² (2.2/100 m ²) GFA	3/100 m ² GFA	
Retail Stores and Repair and Service Shop	1/37 m ² (2.7/100 m ²)	2.2/100 m ² where GFA < 2,000 m ² ; 3.2/100 m ² where 2,000 m ² < GFA < 20,000 m ² ; 4.3/100 m ² where GFA > 20,000 m ²	1/25 m ² (4/100 m ²)	2.5/100 m ²	2.5/100 m ² GFA	

