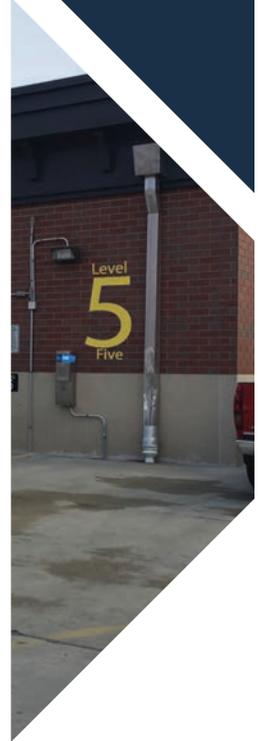


Phase One Parking Improvements Implementation Plan





REPORT CONTENTS

Memorandum	3
Recommendations 1.1 - 1.2	4
Blade Signs: Vail Garage & North Garage	5
Pole Mounted Signs: Parking Lots A, E, H, Evergreen Garage	7
Recommendation 1.3	9
Assign Names to Lots vs. Current Lettering	
Recommendation 1.4	10
Color Coding Garage Levels / Signage	
Recommendation 2.0	12
Parking Guidance System: Vail Garage	
Recommendation 3.1	15
Electronic Pay Stations	
Recommendation 3.2	16
Pay by Mobile Phone App	
Recommendation 7.2	16
Assign Merchant and Commuter Parking Permits to 4th and 5th floors of Vail garage.	
Recommendation 9.1 - 9.4	17
Marketing Village Hall garage, Lot S, Lot A	
Preliminary Budget Estimates	18
Phase One Parking System Improvements	



MEMORANDUM

M

To: Randy Recklaus, Village Manager
From: Bill Enright, Deputy Director Planning and Community Development
Date: January 4, 2019
RE: Committee of the Whole: January 14, 2019
Downtown Parking Study: Phase One Implementation Plan

On October 22, 2018 staff and the Village's parking consultant Rich and Associates, presented the findings and recommendations of the downtown parking study. The Board directed staff to develop an implementation plan for the Phase One improvements including costs, funding options, and time-line for implementation. Attached please find the recommended implementation plan for Phase One improvements which include the following:

1. Vail Avenue Garage Parking Guidance System
2. Parking Blade Signs for Vail Garage and North Garage
3. Pole Mounted Parking Signs for Surface Lots A, E, H and the Evergreen Avenue underground garage
4. Color Coding Vail Avenue Garage and North Garage floors and enhanced signage informing customers of floor levels.
5. Pay by Phone payment app for daily fee spaces.

If the Board directs staff to move forward with the parking guidance system, and or the parking blade signs and pole signs, those two projects: (1) guidance system and 2) the signage), would be bid out separately and would require Board approval, including a budget amendment to the Municipal Parking Fund budget, which has the funding in place to pay for the Phase One projects if approved by the Board. Projects would be funded by Municipal Parking Fund Reserves.

Tentative Timeline:

January 2019: Board authorization to proceed

February 2019: Bid Project(s)

March: Board approval of Bid(s)

April/May: Garage interior signage improvements (Vail and North garages; fabrication of signs could be longer depending on vendor)

Summer: Implement Mobile Pay for Daily Fee

June/July: Install signage (blade signs Vail and North garages, pole signs)

August: Install parking guidance system Vail garage

The staff parking committee will continue to evaluate the other recommendations of the study and report back to the Board at a future Committee of the Whole meeting in Second Quarter 2019.

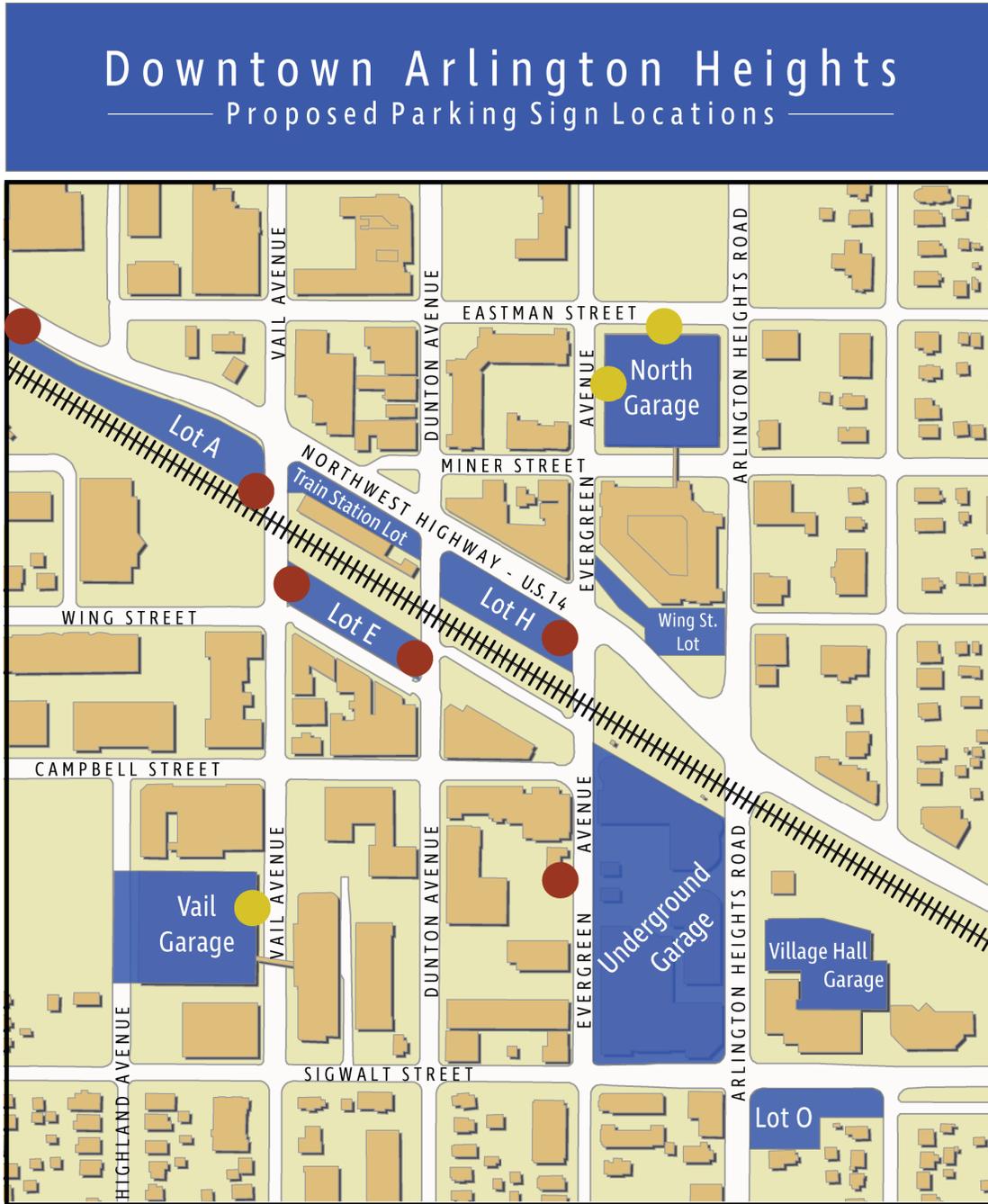
3

RECOMMENDATIONS 1.1-1.2

Blade Signs & Pole Mounted Signs

Purpose: To improve exterior signage for parking garages and parking lots.

Location Map:



● = Location of Pole Signs ● = Location of Blade Signs

RECOMMENDATION 1.1

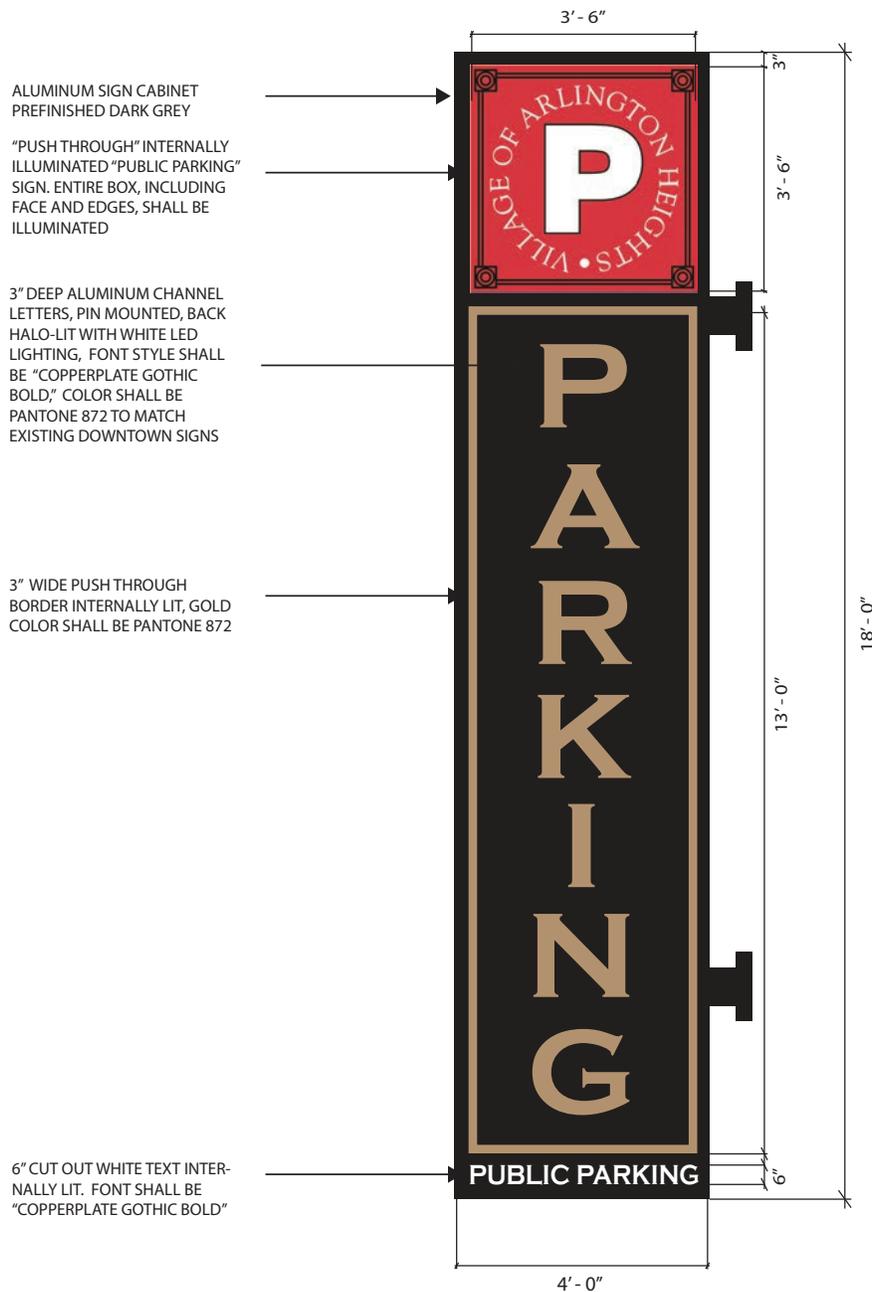
Blade Signs: Vail Garage & North Garage

Estimated Cost: \$22,000 per sign: 3 signs total **\$66,000**

(3 estimates obtained \$66,000; \$90,000; \$90,000). Internally lit; 18 feet tall. Option to reduce costs would be to install only one blade sign on North garage, Evergreen entrance.

Funding Source: Capital Projects Fund FY 2018 for Vail Garage Blade Sign (currently budgeted); remaining signs Municipal Parking Fund

Time Frame to Fabricate and Install: 12 to 14 weeks (may take longer depending on vendor)



RECOMMENDATION 1.1

Blade Signs: Vail Garage & North Garage



VAIL GARAGE - LOOKING SOUTH ON VAIL AVENUE



NORTH GARAGE - LOOKING EAST ON EASTMAN STREET

RECOMMENDATION 1.2

Pole Mounted Signs: Parking Lots A, E, H, Evergreen Garage

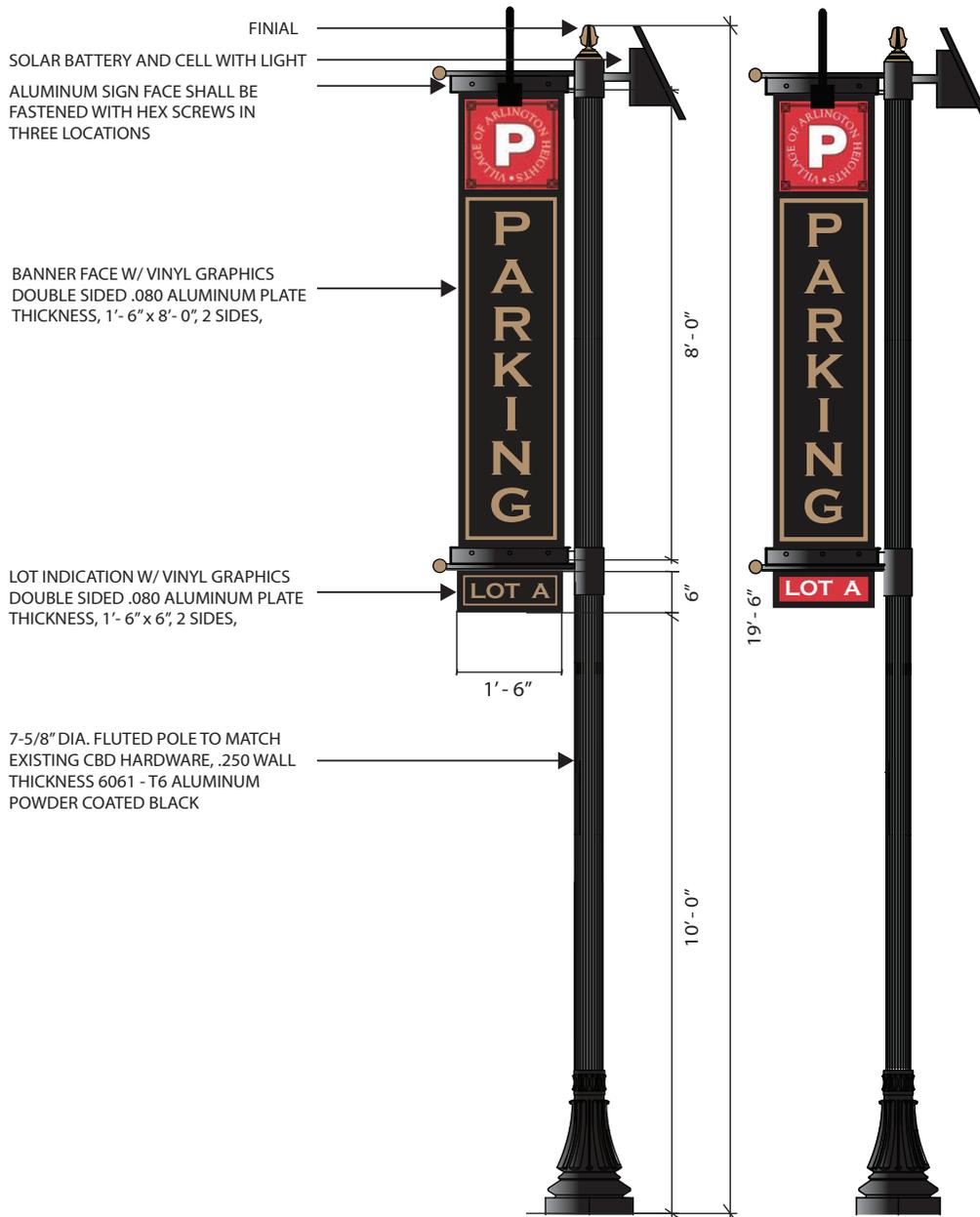
Estimated Cost: \$10,000 per pole: 6 pole signs total **\$60,000**

(3 estimates obtained: \$60,000; \$75,000; \$84,000).

Utilize decorative poles to match downtown street furniture/poles.

Funding Source: Municipal Parking Fund

Time Frame to Fabricate and Install: 12 to 14 weeks (may take longer depending on vendor)



DRAWINGS NOT TO SCALE

RECOMMENDATION 1.2

Pole Mounted Signs: Parking Lots A, E, H, Evergreen Garage



LOT A - LOOKING NORTH ON VAIL AVENUE



LOT E - LOOKING SOUTH ON VAIL AVENUE

RECOMMENDATION 1.3

Assign Names to Lots vs. Current Lettering

Estimated Cost: Minimal signage

Funding Source: Municipal Parking Fund

Time Frame: 4 weeks

Staff does not recommend changing names based on location, but rather will need to rename lots with Daily Fee parking as "Zone 1", "Zone 2", etc., as this renaming would be consistent with the mobile pay app system.

RECOMMENDATION 1.4

Color Coding Garage Levels / Signage

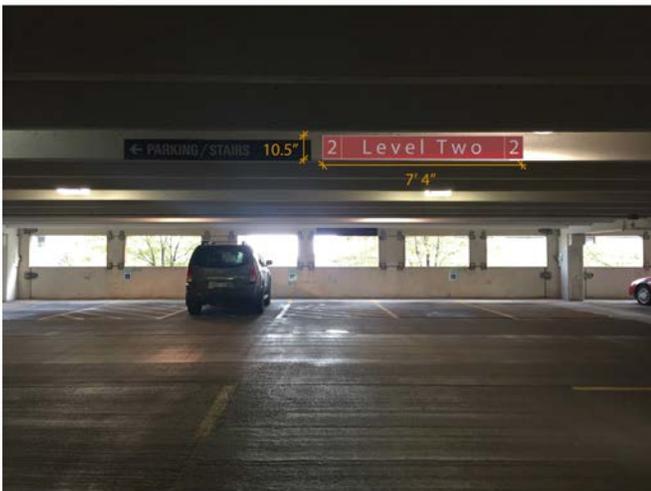
Estimated Cost: \$5,000 for Signage, \$16,000 for Painting

Funding Source: Municipal Parking Fund

Time Frame: Large Painted Floor Numbers Spring 2019 / Garage Level Signs on Beams 2nd Quarter 2019

Location: All five floors of Vail Garage and all four floors North Garage;
Large floor numbers at all four stair towers.

Also, signage at each level on cross beams indicating which level you are now entering / upon.



RENDERINGS OF PROPOSED COLOR-CODED GARAGE SIGNAGE



RENDERINGS OF PROPOSED COLOR-CODED GARAGE SIGNAGE

RECOMMENDATION 2.0

Parking Guidance System: Vail Garage

PRIMARY SYSTEM

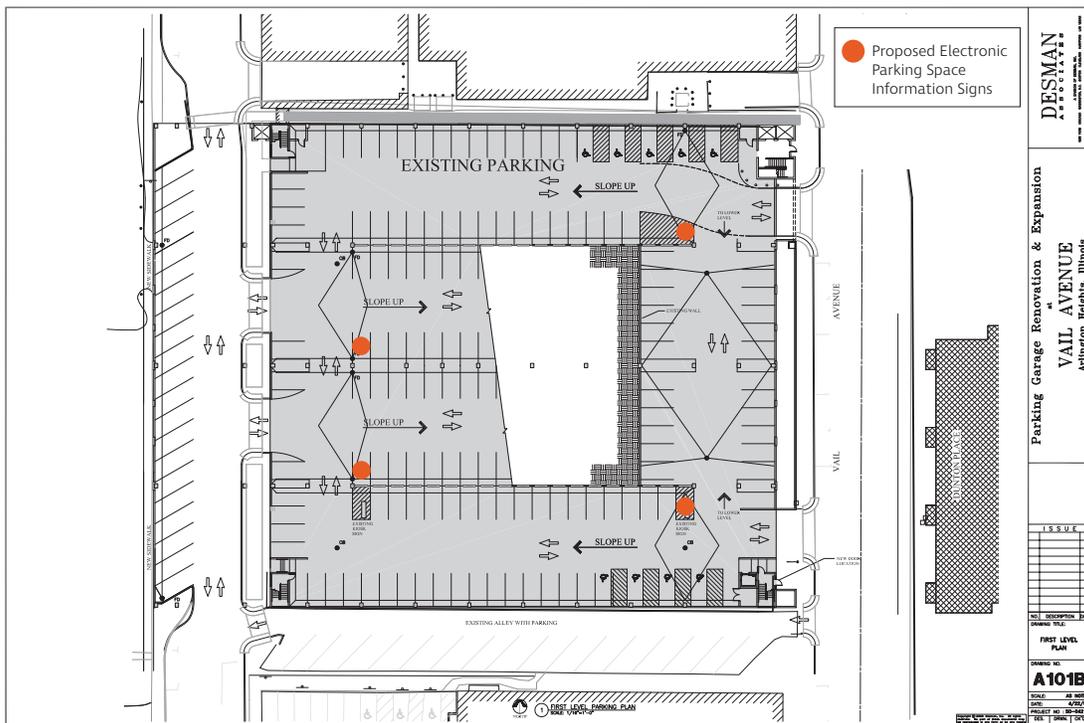
Parking Guidance Systems are comprised of two primary elements; the first being sensors installed at the end of each parking row, and the second being a set of informational signs. The sensors detect whether or not spaces are occupied, and relay this information to digital display signs. These digital display signs indicate the number of available spaces at any given time, and are configured so as to display the number of available spaces on each floor of the garage. Signs would be positioned at the entrances to the Vail Garage and, optionally, on level 4. The optional additional signage on level 4 would provide further guidance for visitors, indicating the number of available spaces to the left and right of the ramp.



PARKING GUIDANCE SYSTEM SIGN INSTALLATION



OPTIONAL DIRECTIONAL GUIDANCE SYSTEM SIGN INSTALLATION



PROPOSED PARKING GUIDANCE SYSTEM SIGN LOCATIONS-LEVEL 1

RECOMMENDATION 2.0

Parking Guidance System: Vail Garage

ALTERNATIVE SYSTEM

The primary system as described on the previous page provides a total count of available spaces for each floor, however does not indicate the availability of individual spaces. One drawback to this system is that if one of the parking space sensors fail, invalid parking space availability counts will be shown for the respective level of the garage.

Staff has also explored use of an alternate, more accurate system. This alternate system has sensors over each individual space, so that if a sensor fails it does not significantly impact space availability information.

A typical Single Space installation means that every parking space is monitored by an overhead mounted single space sensor. This sensor detects vehicle presence by ultrasonic measurements. When a vehicle enters a parking space, the sensor LEDs switch from green to red, and the change in occupancy is transmitted to a zone controller. Other color options are available to indicate, for example, handicapped and other reserved spaces. Space availability status per drive aisle, level, and/or garage is then displayed on strategically located parking guidance signage, controlled by the Parking Guidance System server. The Single Space Sensors are installed on the ceiling at the end of each parking space. This system, while more accurate, has a higher cost.



INDIVIDUAL SPACE
SENSOR



INDIVIDUAL SPACE SENSOR
SYSTEM INSTALLATION

A hybrid of both systems could be used within the Vail Garage, with the more accurate, single space sensor system used on levels 4 and 5 of the garage, and the more cost-effective system used on levels 1, 2, and 3. Staff would like to bid both systems out to determine the costs of both systems.

RECOMMENDATION 2.0

Parking Guidance System: Vail Garage

Estimated Cost:

Primary Sensor System:

Estimate Firm A: \$134,000

Estimate Firm B: \$230,000

(installation costs much higher than Estimate A; should get better prices when competitively bid as install quote was obtained by manufacturer from just one electrical firm)

Alternative Individual Space Sensor System:

Estimated Cost: Approximately \$420,000

(Staff would like to bid this system as an alternative)

Possible Additional Directional Guidance at Level 4:

Estimate Firm A: \$44,000 for two signs, one each at the north ramp and south ramp as drivers come upon the 4th level.

Estimate Firm B: \$30,000 for signs at level 4 and 5 to guide visitors directionally to open spaces.

Funding Source:

Municipal Parking Fund

Time Frame:

18 – 20 weeks (fabricate, ship, install ; may take longer depending on vendor)

Guidance Sign Location:

At all 4 entries to Vail Garage

Maintenance:

City of Naperville has a parking guidance system in three facilities, fairly low maintenance. Budget of approximately \$10,000 annually. Key is to protect from water, elements.

RECOMMENDATION 3.1

Electronic Pay Stations

Estimated Cost: \$10,800 per station 11 to 14 stations: \$118,800 to \$151,200 (Daily Fee locations)

Annual extended warranty is \$1,380 per pay station to cover maintenance, repairs; also back office system providing for acceptance of payment by phone, credit, and management/financial reporting is \$980 per station annually. These additional annual costs would range from \$26,000 to \$33,000. The Village could recoup some or all these annual costs via higher parking fees.

Funding Source: Municipal Parking Fund

Time Frame: Not Recommended as part of Phase One due to costs. Staff will continue to evaluate electronic pay stations as part of a future phase.



ELECTRONIC PAY STATION

RECOMMENDATION 3.2

Pay by Mobile Phone App

Estimated Cost: None to Village; Service fee charged to users \$0.41 per payment (approximately)

Funding Source: N/A

Time Frame: 12 – 16 weeks

RECOMMENDATION 7.2

Assign Merchant and Commuter Parking Permits to 4th and 5th floors of Vail garage.

Estimated Cost: Minimal: Some signage costs internal

Funding Source: Downtown Parking Fund

Time Frame: Staff evaluating this concept. The issue is that some commuters and merchants park on either level 2 or 3 during the day forcing some residents to park on level 4 when they return home from work. Thus these residents, who could otherwise park on level 2 or 3, are taking up parking on level 4 that could be used by visitors during the evenings. There are pros and cons to doing so as it could have negative impacts during the day Monday to Friday when there are day time events at Metropolis. In the alternative, staff is evaluating reducing the number of commuter permits sold in the Vail garage.

RECOMMENDATION 9.1-9.4

Marketing Village Hall garage, Lot S, Lot A

Estimated Cost: None

Time Frame: ASAP.

Staff has developed a new parking map specific to customers visiting downtown to clearly delineate what locations they can park. This map will be posted online and sent to all Downtown businesses as well as a link to the Village web site for each business to link their web site to the Village web site for parking. Staff will also coordinate prior to events downtown social media blasts to promote where to park, with emphasis on the Village Hall garage, Lots S, and Lot A.

Staff is currently evaluating options to direct patrons of Downtown to various lots for special events.



PRELIMINARY BUDGET ESTIMATES

Phase One Parking System Improvements

	Recommendation	Cost Estimate	Funding Source
1.1	Garage Exterior Blade sign		
	Vail Garage	\$22,000	Municipal Parking Fund
	North Garage	\$44,000	Municipal Parking Fund
	Sub Total:	\$66,000	Municipal Parking Fund
1.2	Pole Mounted Parking Lots Signs		
	Evergreen Garage	\$14,000	
	Lot A	\$28,000	
	Lot E	\$28,000	
	Lot H	\$14,000	
	Sub Total:	\$84,000	Municipal Parking Fund
1.3	Assign Names to Lots vs. Lettering	Minimal	
1.4	Clearly indicate parking garage levels on beams/columns/stairs	\$5,000	Municipal Parking Fund
1.5	Color Code Each Level in Garages	\$16,000	Municipal Parking Fund
2.0	Parking Availability Guidance System		
2.1	Vail Garage	\$134,000 to \$464,000	
	Sub Total:	\$134,000 to \$464,000	Municipal Parking Fund
7.2	Assign Merchant and Commuters to 4th and 5th floors Vail Garage	N/A	For further discussion
9.1-9.4	Marketing of Village Hall Garage, Lot A, and Lot S	Minimal	
	Overall Total Phase One:	\$305,000 to \$653,000	
	15% Contingency	\$45,750 to \$97,250	
	Total:	\$350,750 to \$748,250	

1) These are preliminary cost estimates subject to refinement as we obtain bids, and are subject to budgeting and approval by the Board.