LANSDALE PARKING AUTHORITY

DOWNTOWN PARKING STUDY

2022 UPDATES

Lansdale Borough, Montgomery County, Pennsylvania

PENNONI PROJECT NO.: LNSDL20005

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Executive Summary

The Lansdale Parking Authority operates to acquire, hold, construct, maintain, improve, operate, own, and lease property for the provision of parking spaces and uses necessary or incidental thereto. Lansdale Borough has undergone significant redevelopment in the downtown district over the last decade. Both the Borough and the Parking Authority have been prominent forces promoting this development either through traditional capital projects such as the Main & Broad Streetscape and the Wood-Vine Connector, or public-private partnerships such as the Madison Redevelopment, Luxor development adjacent to the Freight House, and the SEPTA Parking Garage. The downtown landscape has grown significantly since the last parking study commissioned by the LPA in 2011. The 2022 Updates Report assessed those recommendations, evaluated their implementation, studied current and future demand and supply, and provides new recommendations to maintain a successful and complimentary downtown parking program over the next decade.

Since the last parking study was commissioned, significant changes to the downtown landscape include the construction of the Vine Street Parking Lot expanding to approximately 50 spaces). The Madison Lot (which used to support railroad commuters with low-cost options) eliminated approximately 130 parking spaces in conjunction with the site's redevelopment. Approximately 19 metered spaces were eliminated from Railroad Avenue. The SEPTA Ninth Street Station was constructed adding 78 parking spaces. The Freight House parking lot is expected to be completed in early 2023 adding 82 parking spaces.

While the parking data collected shows that there is adequate parking available in most of the study area, **it is critical to the continued success of the Borough that the LPA identifies and pursues additional parking opportunities in the downtown core of Lansdale.** As new developments and redevelopments occur the opportunities to 'react' to address parking needs become difficult. Proactively pursuing additional parking now will help support new development in Lansdale's core. Currently, downtown core parking not required by ordinance with new development, falls on the LPA. Alternatively, the Borough could amend the land development ordinance to require new developments to provide adequate off-street parking. As the ordinance is written, developments are allowed to continue to expand without providing parking, further exacerbating the situation.

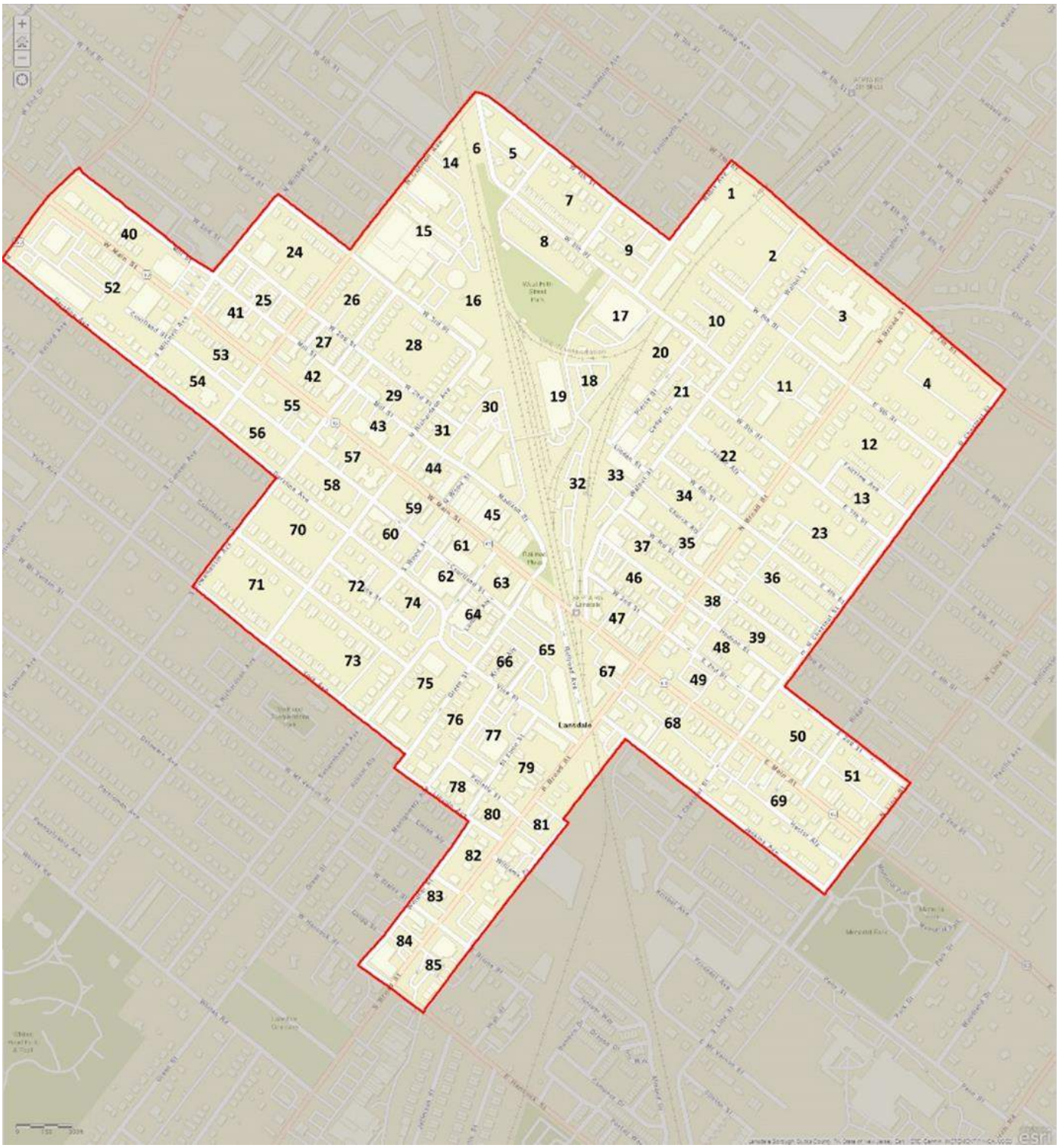
The utilization of the LPA lots (W. Main Lot and Madison Avenue/Madison Street Lots) reaches 90% during the evening hours. Likewise, the on-street metered parking areas regulated by the LPA reach 85% occupied at the peak hour between 6pm and 7pm. This only occurred on one day of data collection and there are likely days where occupancy reaches 100%, further supporting the need for the LPA to pursue additional parking supply in the Lansdale Downtown Core Area.

Study Area

The study area for this 2021 update is encompasses the area surveyed in the previous study "Lansdale Comprehensive Parking Study Final Report" dated September 2012 by McMahon/Nelson Nygaard (Figure 3-2, page 3-5). Our team not only collected data on the assets inventoried in 2012 but we also looked at local roadways that were just outside the parameters in the previous study. This provides a more realistic understanding of the true parking conditions. In other words, data was not only gathered along the major arteries but also the streets directly adjacent.

The downtown study area is bounded by 7th Street, Line Street, Hancock Street, and Valley Forge Road and the Pennbrook Station study area is bounded by Cherry Street, Station Square Boulevard, and Church Road. Maps depicting the boundary of the two areas included in this study are shown on the following pages. Please note, the numbers shown on the maps indicate the block identifiers which were assigned during the data collection process.

Downtown Study Area Map



Source: Borough of Lansdale GIS Maps, Pennoni and THA Consulting, 2022

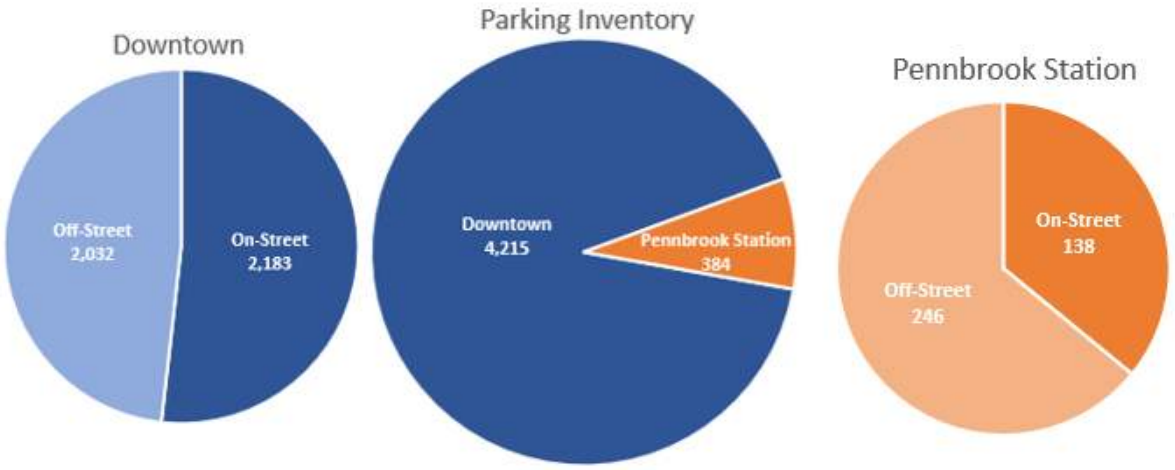
Pennbrook Station Study Area Map

Source: Borough of Lansdale GIS Maps, Pennoni and THA Consulting, 2022

Parking Inventory

Our team recorded a total of 4,599 parking spaces. There are 4,215 parking spaces in the downtown study area comprised of 2,183 on-street spaces and 2,032-off-street spaces. We also recorded a total of 384 parking spaces in the Pennbrook Station study area, 138-on-street spaces and 246 off-street spaces. A large majority of the parking surveyed in this study is located in the downtown sub-area (92%) with those 4,215 parking spaces distributed almost equally between on- and off-street parking areas. The following table summarizes the 2021 inventory and depicts the breakdown by location and parking type (i.e. on-street vs off-street).

2021 Parking Inventory	Downtown	Pennbrook Station	Total
On-Street	2,183	138	**2,321**
Off-Street	2,032	246	**2,278**
Total	**4,215**	**384**	**4,599**



Source: Pennoni and THA Consulting, 2022

Parking Inventory by Regulation

To better understand the composition of the existing parking infrastructure, we recorded the parking regulations for each on-street block face and off-street parking lot/garage. The inventory by regulation type for the Downtown and Pennbrook Station Sub-Areas is included in the table on the following page.

2021 Downtown and Pennbrook Station Parking Inventory by Regulation

DOWNTOWN SUB-AREA	Parking Inventory			
Regulation	Total	ADA	Standard	%
Free	1,664	27	1,637	39%
SEPTA	838	21	817	20%
15-minute	8	0	8	0%
30-minute	4	0	4	0%
2-Hour	25	1	24	1%
Metered	291	11	280	7%
Residential Permit	327	0	327	8%
Private	1,058	10	1,048	25%
Total	**4,215**	**70**	**4,145**	**100%**

PENNBROOK STATION SUB-AREA	Parking Inventory			
Regulation	Total	ADA	Standard	%
Free	87	0	87	23%
SEPTA	86	4	82	22%
Metered	160	6	154	42%
Residential Permit	51	0	51	13%
Total	**384**	**10**	**374**	**100%**

Source: Pennoni and THA Consulting, 2022

Of note, less than half (47%) of the parking inventory in the Downtown Sub-Area is available for general public use (Free 39%, 1% Time Restricted, and 7% Metered), while the remaining 54% is designated for specific user groups including SEPTA 20%, Residential Permits 8%, and Private Use 26%. This is important because as growth and development occurs in Lansdale, the public infrastructure will be more heavily burdened. Additionally, within the Downtown Business Overlay District, parking requirements are waived for all buildings less than 20,000 square feet. As you will see later in this report, our team observed an existing surplus of parking in Lansdale but as with any municipality, parking is a finite resource that should be treated and valued as such.

In the Pennbrook Station Sub-Area, 65% of the parking inventory is available for general public use (Free 23% and 42% Metered), while the remaining 35% is designated for specific user groups including SEPTA 22% and Residential Permits 13%. This area is also more transit oriented vs. business/commercial as in the Downtown Sub-Area.

2021 vs 2012 Parking Inventory Comparison

As shown on the next page, the recorded parking supply in 2012 was 3,981 spaces while the recorded supply in 2021 was 4,599 spaces, a difference of 618 parking spaces. This is primarily due to the SEPTA parking garage which opened in 2017. In addition, our team collected data beyond the major arteries and into the feeder streets which is the main reason an additional 1,261 on-street parking spaces were recorded in downtown. Discrepancies and inconsistencies were noted in the previous report which may have included some variances in the classification of on- vs. off-street parking, however, the data provided was insufficient for us to make this determination.

2021 vs 2012 Parking Inventory Comparison

2021 Parking Inventory	Downtown	Pennbrook Station	Total
On-Street	2,183	138	**2,321**
Off-Street	2,032	246	**2,278**
Total	**4,215**	**384**	**4,599**

2012 Parking Inventory	Downtown	Pennbrook Station	Total
On-Street	922	43	**965**
Off-Street	2,679	337	**3,016**
Total	**3,601**	**380**	**3,981**

2021 vs. 2012 Variance	Downtown	Pennbrook Station	Total
On-Street	1,261	95	**1,356**
Off-Street	(647)	(91)	**(738)**
Total	**614**	**4**	**618**

Source: McMahon/Nelson Nygaard 2012 Study and Pennoni Team, 2022

The table below summarizes the current 2021 regulations against those recorded in 2012. Please note, the 2012 report contained numerical errors which are noted below.

2021 vs 2012 Parking Inventory Comparison by Regulation

Regulation	2021 Inventory	2012 Inventory[1]	2021 vs 2012
Free	1,751	674	1,077
SEPTA	924	585	339
Time Restricted	37	97	(60)
Metered	451	554	(103)
Residential Permit	378	43	335
Private	1,058	2,012	(954)
Total	**4,599**	**3,965**	**634**

[1] *Classified Sunday Only under Free Category, $1/day under Metered Category, Customer Only under Private Category, and Permit under Residential Permit Category. Mathematical error in 2012 report tables account for the 16-space disparity from previous tables.*

Source: Pennoni and THA Consulting, 2022

Based on the 2021 vs 2012 comparison table there are:

- Over 1,000 more free spaces in 2021 compared to 2012,
- An additional 339 SEPTA parking spaces due to the addition of the SEPTA Garage,
- Fewer time restricted and metered parking spaces compared to 2012,
- 335 more residential permit spaces compared to 2012, and
- 954 fewer private parking spaces allocated to a single use/user group.

2021 Parking Demand and Occupancy

Our team performed data collection on Wednesday, August 11, 2021, by physically walking and counting the total number of parked vehicles within each off-street parking facility as well as on each street within the study area. In cases where illegally parked vehicles were observed, our team also accounted for those vehicles as they represent the "demand."

Parking occupancy counts were performed in 2-hour increments starting at 7am and running until 8pm, with a one (1) hour gap between 1pm and 2pm that day. There was construction on Columbia Street from Susquehanna Street to Richardson Street from 7 am to 2 pm and not clearly marked open after 2 pm. The peak parking demand was observed from 4pm-6pm with 1,414 vehicles occupying the 4,599 spaces or a peak occupancy of 31%.

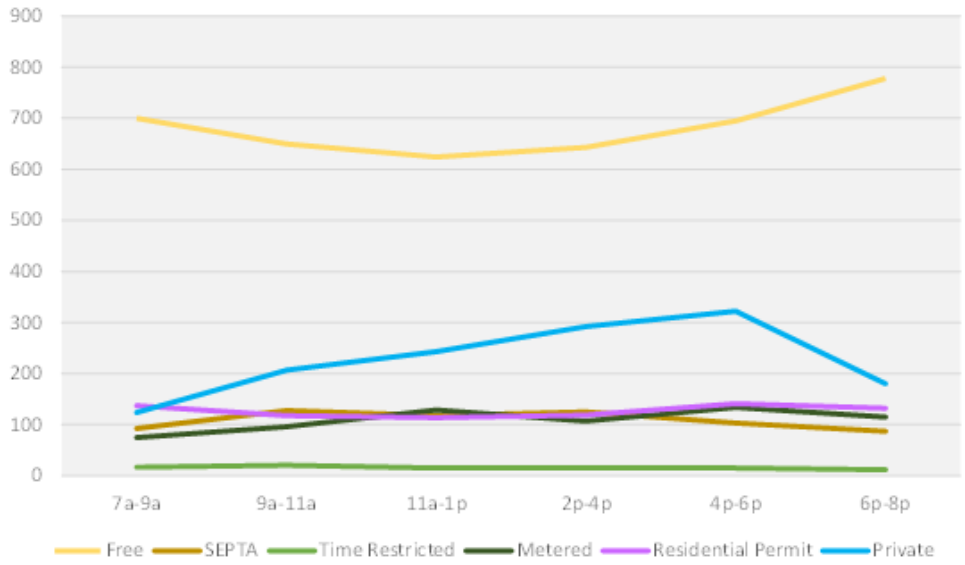
During the 2012 parking study, the overall peak occupancy was just under 50% (1,985 vehicles parked between 11am-1pm). However, during that time, all the SEPTA parking lots (both downtown and at Pennbrook Station) were filled to capacity.

During the 2021 occupancy counts, the downtown SEPTA garage (660 parking spaces) was closed, and the downtown SEPTA lot was only 50% occupied. Likewise, the two SEPTA lots at Pennbrook Station only reached a peak occupancy of 42%. Therefore, while the 2021 occupancy was lower than in 2012, due to the lower utilization of the SEPTA lots, the utilization in other parking areas has remained about the same as they were in 2012.

We recognize and note that the pandemic has negatively impacted the parking demand in Lansdale during our collection activities. The extent of this impact is unknown and is, however, difficult and complex to measure. The tables and figures on the following pages outline the 2021 overall parking demand and occupancy by hour, as well as the same for the Downtown and Pennbrook Station Sub-Areas.

2021 Total Parking Demand and Occupancy by Hour (Overall Study Area)

OVERALL STUDY AREA	PARKING DEMAND						PARKING OCCUPANCY					
	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p
Free	700	650	624	643	695	778	40%	37%	36%	37%	40%	44%
SEPTA	93	128	118	125	103	87	10%	14%	13%	14%	11%	9%
15-minute	4	5	4	4	3	1	50%	63%	50%	50%	38%	13%
30-minute	0	0	0	0	0	0	0%	0%	0%	0%	0%	0%
2-Hour	13	16	11	11	12	11	52%	64%	44%	44%	48%	44%
Metered	89	111	138	122	147	133	20%	25%	31%	27%	33%	29%
Residential Permit	137	118	114	119	141	132	36%	31%	30%	31%	37%	35%
Private	117	200	234	285	313	171	11%	19%	22%	27%	30%	16%
Total	**1,153**	**1,228**	**1,243**	**1,309**	**1,414**	**1,313**	**25%**	**27%**	**27%**	**28%**	**31%**	**29%**



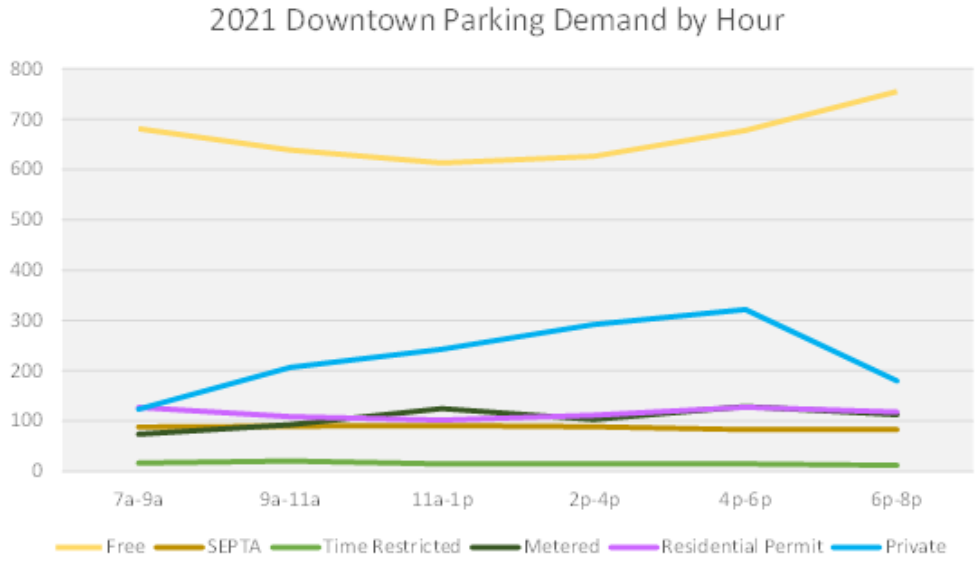
Source: Pennoni and THA Consulting, 2022

As noted above, SEPTA parking facilities (and train service) were partially closed and as a result, those parking facilities never exceeded 15% of their capacity. All other regulated parking areas, except for the 33 parking spaces marked for 15-minute and 2-hour parking, did not exceed 37% capacity. Additionally, even the unregulated free parking areas only reached a peak occupancy of 44% during the evening hours between 6-8pm.

The peak demand (32% occupancy) in the Downtown Sub-Area occurs from 4pm-6pm as shown in the tables and figures below.

2021 Downtown Sub-Area Parking Demand and Occupancy by Hour

DOWNTOWN SUB-AREA	PARKING DEMAND						PARKING OCCUPANCY					
	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p
Free	681	639	613	626	678	755	41%	38%	37%	38%	41%	45%
SEPTA	89	90	91	89	83	83	11%	11%	11%	11%	10%	10%
15-minute	4	5	4	4	3	1	50%	63%	50%	50%	38%	13%
30-minute	0	0	0	0	0	0	0%	0%	0%	0%	0%	0%
2-Hour	13	16	11	11	12	11	52%	64%	44%	44%	48%	44%
Metered	74	93	125	103	129	113	28%	35%	47%	39%	49%	43%
Residential Permit	127	109	102	112	128	118	39%	33%	31%	34%	39%	36%
Private	124	207	243	292	322	180	11%	19%	22%	27%	30%	17%
Total	**1,112**	**1,159**	**1,189**	**1,237**	**1,355**	**1,261**	**26%**	**27%**	**28%**	**29%**	**32%**	**30%**



Source: Pennoni and THA Consulting, 2022

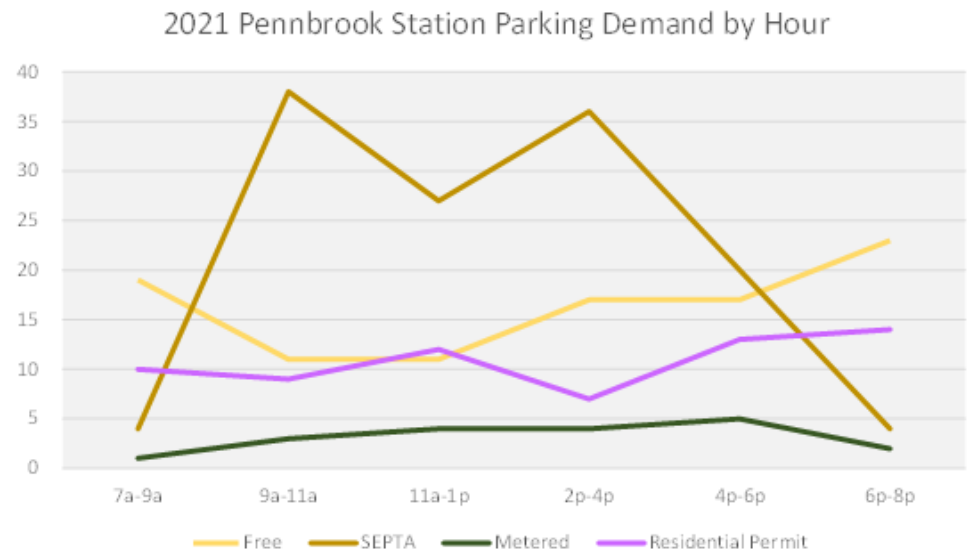
Again, parking within the 33 spaces designated as 15-minute and 2-hour parking was the highest used parking areas followed by the 265 metered parking spaces which reached 49% occupied between 4-6pm. The impact from COVID has most likely negatively impacted the activity levels in Downtown, but we anticipate that the existing parking system would likely be able to support non-pandemic activity levels based on the overall numbers shown.

The peak demand (17% occupancy) in the Pennbrook Station Sub-Area occurs from 2pm-4pm as shown in the tables and figures below.

2021 Pennbrook Station Sub-Area Parking Demand by Hour

PENNBROOK STATION SUB-AREA	PARKING DEMAND					
	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p
Free	19	11	11	17	17	23
SEPTA	4	38	27	36	20	4
Metered	1	3	4	4	5	2
Residential Permit	10	9	12	7	13	14
Total	34	61	54	64	55	43

PARKING OCCUPANCY					
7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p
22%	13%	13%	20%	20%	26%
5%	44%	31%	42%	23%	5%
1%	2%	3%	3%	3%	1%
20%	18%	24%	14%	25%	27%
9%	16%	14%	17%	14%	11%



Source: Pennoni and THA Consulting, 2022

Since the Lansdale SEPTA Station's service was interrupted, local residents were utilizing the Pennbrook Station for SEPTA service. For that reason, the SEPTA facilities in this Sub-Area were more heavily utilized as shown above.

Effective Parking Supply

When calculating the parking adequacy, a cushion is applied to the parking supply to compensate for misparked vehicles, spaces lost due to maintenance or snow removal, and the flow of vehicles in and out of parking spaces. Industry standards typically apply an effective supply factor of 85% to 95% which represent a "cushion" between 5 to 15 percent of the total capacity. For the purpose of this study, a 65% effective supply factor (35 percent cushion) has been applied to all ADA parking spaces due to the location and observed utilization of those spaces. We applied an effective supply factor of 85% (15% cushion) to all on-street free and time restricted spaces, all residential permit on-street spaces, and metered parking areas. Finally, we applied a 90% factor to the SEPTA and private parking facilities (10% cushion). The table on the following page outlines the calculations for the effective supply.

2021 Effective Parking Supply

OVERALL STUDY AREA	Parking Inventory			Eff. Supply Factor		Effective Supply		
	Total	ADA	Standard	ADA	Standard	Total	ADA	Standard
Free	1,751	27	1,724	65%	85%	1,483	18	1,465
SEPTA	924	25	899	65%	90%	825	16	809
15-minute	8	0	8	65%	85%	7	0	7
30-minute	4	0	4	65%	85%	3	0	3
2-Hour	25	1	24	65%	85%	21	1	20
Metered	451	17	434	65%	85%	392	11	381
Residential Permit	378	0	378	65%	85%	321	0	321
Private	1,058	10	1,048	65%	90%	950	7	943
Total	**4,599**	**80**	**4,519**			**4,002**	**52**	**3,950**

Cushion	**597**

Source: Pennoni and THA Consulting, 2022

There is a 597-space cushion after applying the effective supply factor to the actual parking supply, resulting in an effective parking supply of 4,002 spaces within the entire study area.

We have also prepared the same for each Sub-Area as shown below.

2021 Downtown and Pennbrook Station Sub-Area Effective Parking Supply

DOWNTOWN STUDY AREA	Parking Inventory			Effective Supply		Effective Supply		
	Total	ADA	Standard	ADA	Standard	Total	ADA	Standard
Free	1,664	27	1,637	65%	85%	1,409	18	1,391
SEPTA	838	21	817	65%	90%	749	14	735
15-minute	8	0	8	65%	85%	7	0	7
30-minute	4	0	4	65%	85%	3	0	3
2-Hour	25	1	24	65%	85%	21	1	20
Metered	265	9	256	65%	85%	226	6	220
Residential Permit	327	0	327	65%	85%	278	0	278
Private	1,084	12	1,072	65%	90%	973	8	965
Total	**4,215**	**70**	**4,145**			**3,666**	**46**	**3,620**

PENN BROOK STATION STUDY AREA	Parking Inventory			Effective Supply		Effective Supply		
	Total	ADA	Standard	ADA	Standard	Total	ADA	Standard
Free	87	0	87	65%	85%	74	0	74
SEPTA	86	4	82	65%	90%	76	3	74
Metered	160	6	154	65%	85%	143	4	139
Residential Permit	51	0	51	65%	85%	43	0	43
Total	**384**	**10**	**374**			**336**	**7**	**330**

Source: Pennoni and THA Consulting, 2022

2021 Parking Adequacy

To calculate the parking adequacy, parking surplus or shortage, we compare the parking demand against the effective parking supply as previously calculated. The following table summarizes the parking adequacy for each sub-area and parking location type captured in this analysis.

2021 Overall Study Area Parking Adequacy

OVERALL STUDY AREA	EFFECTIVE SUPPLY	PARKING DEMAND						PARKING ADEQUACY					
		7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p
Free	1,483	700	650	624	643	695	778	783	833	859	840	788	705
SEPTA	825	93	128	118	125	103	87	733	697	707	700	722	738
15-minute	7	4	5	4	4	3	1	3	2	3	3	4	6
30-minute	3	0	0	0	0	0	0	3	3	3	3	3	3
2-Hour	21	13	16	11	11	12	11	8	5	10	10	9	10
Metered	392	89	111	138	122	147	133	303	281	254	270	245	259
Residential Permit	321	137	118	114	119	141	132	184	203	207	202	180	189
Private	950	117	200	234	285	313	171	833	750	716	665	637	779
Total	**4,002**	**1,153**	**1,228**	**1,243**	**1,309**	**1,414**	**1,313**	**2,850**	**2,774**	**2,759**	**2,693**	**2,588**	**2,689**

Source: Pennoni and THA Consulting, 2022

The study area, as a whole, is currently operating with a parking surplus of 2,592 parking spaces during the peak hour parking demand as observed in August 2021.

2021 Downtown and Pennbrook Station Sub-Area Parking Adequacy

DOWNTOWN SUB-AREA	EFFECTIVE SUPPLY	PARKING DEMAND						PARKING ADEQUACY					
		7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p
Free	1,409	681	639	613	626	678	755	728	770	796	783	731	654
SEPTA	749	89	90	91	89	83	83	660	659	658	660	666	666
15-minute	7	4	5	4	4	3	1	3	2	3	3	4	6
30-minute	3	0	0	0	0	0	0	3	3	3	3	3	3
2-Hour	21	13	16	11	11	12	11	8	5	10	10	9	10
Metered	249	88	108	134	118	142	131	161	141	115	131	107	118
Residential Permit	278	127	109	102	112	128	118	151	169	176	166	150	160
Private	950	117	200	234	285	313	171	833	750	716	665	637	779
Total	**3,666**	**1,119**	**1,167**	**1,189**	**1,245**	**1,359**	**1,270**	**2,547**	**2,499**	**2,477**	**2,421**	**2,307**	**2,396**

PENNBROOK STATION SUB-AREA	EFFECTIVE SUPPLY	PARKING DEMAND						PARKING ADEQUACY					
		7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p
Free	74	19	11	11	17	17	23	55	63	63	57	57	51
SEPTA	76	4	38	27	36	20	4	72	38	49	40	56	72
Metered	143	1	3	4	4	5	2	142	140	139	139	138	141
Residential Permit	43	10	9	12	7	13	14	33	34	31	36	30	29
Total	336	34	61	54	64	55	43	302	275	282	272	281	293

Source: Pennoni and THA Consulting, 2022

The Downtown and Pennbrook Station Sub-Areas are also operating with a peak hour parking surplus of 2,307 and 272 spaces, respectively. Based on the data collected within this analysis, the Borough of Lansdale's parking system is operating significantly below capacity.

Future Parking Adequacy

In order to quantify the future parking needs in Lansdale over the next 10 years, our team gathered historical population data in order to quantify the "Normal Growth," or the growth in parking that would naturally occur as a result in a larger population residing in Lansdale.

Due to the pandemic, we also included an estimated recovery growth rate to account for the increased parking demand because of fewer COVID cases and the pent-up demand created from the past two years of social distancing.

Finally, our team requested information from the Borough on all known projects within the study area over next 10-years (through 2031) which would impact parking (supply or demand).

This section of our report outlines our estimated future parking supply, demand, and adequacy over the next 10 years.

Normal and Recovery Growth

Based on historical U.S. Census Data, the average annual population growth from 2010 to 2020 was 1.54%. We have applied this annual growth rate to the peak hour demand in the Downtown and Pennbrook Station Sub-Areas to determine the anticipated Normal growth in those areas.

2010 and 2020 U.S. Census Population Data

U.S.Census Data	
2020 Population	18,773
2010 Population	16,269
10 Year Population Growth Rate	15%
Average Annual Population Growth	1.54%

Source: U.S. Census, Pennoni and THA Consulting, 2022

We have also applied an additional growth "premium" in 2022 and 2023 to account for the reduced 2021 demand captured as part of this study as well as the anticipated recovery and increase in demand as we move out of the pandemic. The premium growth rate applied in 2022 and 2023 is ten times (10x) and five times (5x) the Normal growth rate or 15.4% and 7.7%, respectively. The table below summarizes the projected peak hour demand over the next 10 years with Normal and Recovery Growth.

Estimated Future Peak Hour Parking Demand (Normal and Recovery Growth)

	ESTIMATED FUTURE DEMAND										
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
DOWNTOWN	1,359	1,568	1,689	1,715	1,741	1,768	1,795	1,823	1,851	1,879	1,908
PENNBROOK STATION	55	63	68	69	70	72	73	74	75	76	77
TOTAL STUDY AREA	1,414	1,632	1,757	1,784	1,812	1,840	1,868	1,897	1,926	1,955	1,986

Source: Pennoni and THA Consulting, 2022

Development Growth

According to Borough representatives, there are not any anticipated future development projects within the study area. The only impact noted was the addition of a new 82-space surface parking lot which will open in 2023. The following table summarizes the future effective parking supply after applying the same 85% cushion.

Estimated Future Effective Parking Supply

	ESTIMATED FUTURE EFFECTIVE SUPPLY										
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
DOWNTOWN	3,666	3,736	3,736	3,736	3,736	3,736	3,736	3,736	3,736	3,736	3,736
PENNBROOK STATION	336	336	336	336	336	336	336	336	336	336	336
TOTAL STUDY AREA	4,002	4,072	4,072	4,072	4,072	4,072	4,072	4,072	4,072	4,072	4,072

Source: Pennoni and THA Consulting, 2022

Projected Future Parking Adequacy

By comparing the effective parking supply against the projected peak hour demand, we were able to estimate the future parking adequacy (surplus or shortage). The table below summarizes our findings.

Estimated Future Parking Adequacy

	ESTIMATED FUTURE ADEQUACY										
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
DOWNTOWN	2,307	2,167	2,047	2,021	1,994	1,968	1,940	1,913	1,885	1,856	1,827
PENNBROOK STATION	281	273	268	267	266	265	264	262	261	260	259
TOTAL STUDY AREA	2,588	2,440	2,315	2,288	2,260	2,232	2,204	2,175	2,146	2,116	2,086

Source: Pennoni and THA Consulting, 2022

Unless there are significant variances with the stated assumptions, Lansdale should be able to meet the future parking demand over the next 10-years.

Parking Sign Strategy

Existing Condition

Pennoni staff visited downtown Lansdale to review the existing condition of parking. Figure 1.1 shows the study area in downtown Lansdale.

Figure 1.1 Study area in downtown Lansdale

Figure 1.2 shows the variety of signage in downtown Lansdale. The observation of existing parking signs and discussions with business owners, shoppers, commuters, and residents showed that the current parking sign system is generally satisfactory in terms of clarity, effectiveness, and enforceability. However, the following points were made during this study:

- Additional wayfinding and parking guidance signs are needed.
- The visibility of the signs is affected by trees, plants and vegetation, and seasonal maintenance is required to address this issue.
- Additional explanatory signs regarding the pricing and time limits of street parking spots are required.

- Many shoppers, commuters, and residents are not aware of 15 minutes, free parking option of coin meters on streets and this information could be displayed in more clear way.
- Based on discussion with business owners and residents, the Madison Parking Lot is hard to find for many visitors who are not familiar with the area. More precise parking wayfinding signs are required for this lot.

Figure 1.2 Variety of signage in downtown Lansdale

Figure 1.3 shows the existing parking meters in downtown Lansdale.

Figure 1.3 Existing parking meters

The site visit observation showed that the existing parking meters are in fair condition and residents are satisfied with the application of current parking meters.

Wayfinding and Parking Guidance

An important aspect of any parking system is the way in which the public is informed of parking facility locations, space and availability, time restriction, parking rates, and other related aspects of the system. The evolution of technology has established an environment where real-time information is essential to the traveling public.

Providing drivers advance information about their destination offers a sense of security and confidence for drivers as they navigate both familiar and unfamiliar territory. Providing this information in real-time is increasingly becoming the expectation. While the attractions are the end destination for most people, from driver's perspective, the destination is parking. Real-time parking information and guidance will reduce the number of vehicles circulating for available parking, making the city less congested and safer from both motorist and pedestrian perspective.

There are various means of providing parking information, from typical static signing, dynamic signing, websites and mobile applications.

The Lansdale Parking Authority (LPA) uses static method to provide information about the available parking lots in downtown. However, the current parking wayfinding program could be improved in different ways:

- Providing a district or zone color coded maps of available parking lots, which include the pricing and time limits of available parking lots in downtown.
- Improving existing signs.
- Installing of dynamic parking guidance signs which display the real-time information of parking lots.
- Launching a specific website that provides real-time parking information for downtown Lansdale.

Parking Lot Current Conditions and Maintenance Strategy

The current condition of the six (6) Lansdale Parking Authority parking lots were evaluated to identify areas in need of revitalization and maintenance. The study parking lots include the following:

1. 9th Street Train Station Lot
2. Church Road Lot
3. Madison Street Lot
4. Walnut Street Lot
5. West Main Lot
6. Vine Street Lot

The condition of the pavement, drainage, lighting, access points, circulation, pedestrian access, signage, pavement markings, and the parking meter equipment associated with each parking lot were evaluated. The last evaluation of these lots was completed in 2018 and a Parking Lot Maintenance project was completed in 2019 which addressed these recommendations. The condition of the pavement was evaluated based on visual inspection only - no pavement cores were taken. This evaluation is to serve as a planning and budgeting tool and should not be utilized for detailed rehabilitation repairs or bidding purposes.

9th Street Train Station Lot

Pavement: Crack cleaning and sealing was completed in 2019. The pavement is in good condition. Some transverse cracking and longitudinal cracking were observed. Inspection and maintenance procedures outlined below should be followed to extend the effective service life of the pavement.

Drainage: Drainage issues such as ponding, evidence of ponding, or malfunctioning stormwater systems were not observed.

Lighting: The parking lot has adequate lighting.

Access Points and Circulation: There is a single driveway access point from Ninth Street that is in adequate condition. The drive aisles are wide enough to support two way flow and the loop around the back lot permits vehicles to circulate in, thru, and out of the parking lot without backing or k-turns.

Pedestrian access: Pedestrian is adequate. There are 4 ADA parking spaces which is sufficient for the size of this lot. The ADA spaces have appropriate loading/unloading zones with curb ramps connecting to the site sidewalk. Internally, the sidewalk provides strong connections to the train station platform. The parking lot has sidewalk along the frontage that provides connections to the local roadway sidewalk network across the train tracks.

Signage, Pavement Markings, and Meter Equipment: Signage is in good condition and conflicting signage was not observed. The pavement markings are beginning to fade. Each parking stall is numbered which is no longer necessary with the new parking meter kiosks.

Recommendations:

1. Complete annual inspections.
2. Crack cleaning and sealing should be completed (and addressed at least every two years).
3. Repaint all pavement markings.
4. Cover or allow the numbered stall pavement markings to fade in order to avoid confusion with the current meter equipment (which requires license plate entry).
5. Lighting should be inspected monthly and repaired when necessary.

Church Road Lot

Pavement: The parking lot exhibits evidence of aged pavement in fair condition. Crack cleaning and sealing was completed in 2019. Some transverse cracking and longitudinal cracking were observed. Inspection and maintenance procedures outlined below should be followed to extend the effective service life of the pavement.

Drainage: Drainage issues such as ponding, evidence of ponding, or malfunctioning stormwater systems were not observed.

Lighting: The parking lot has adequate lighting.

Access Points and Circulation: Parking lot access is adequate; however, it can be confusing for a visitor as one must enter the Station Square Shopping Center and maneuver through the center to access the lot. Supplemental wayfinding could be added along northbound Church Road. The wayfinding sign at the Station Square Blvd & Pennbrook Parkway intersection is no longer present. Parking lot circulation is adequate. The drive aisles are wide enough to support two-way flow and permit vehicles to circulate in, thru, and out of the parking lot without backing or k-turns.

Pedestrian access: There are five (5) ADA parking spaces on the north side of the lot and two (2) on the west side for a total of seven (7) ADA spaces which is sufficient for the size of this lot. The five (5) ADA spaces on the north side of the lot do not provide loading/unloading zones. The curb ramps serving all seven (7) ADA parking spaces do not comply with current ADA guidelines. **It is important to note that the LPA has not undertaken any activity at this location that *triggers* ADA upgrades,** although updates to the ADA facilities here could be considered to improve pedestrian access. Two of the ADA parking spaces would likely have to be relocated to an alternate location and the parking lot would likely lose three (3) parking spaces to provide conforming loading/unloading areas. Internally, the sidewalk provides strong connections toward the local sidewalk network, the train station platform, and the Station Square Shopping Center. Pedestrian access is adequate, although ADA upgrades could be considered to further improve access.

Signage, Pavement Markings, and Meter Equipment: As noted above, the wayfinding sign at Station Square Blvd & Pennbrook Parkway intersection has been removed. An additional wayfinding sign could be added (or relocated) along northbound Church Road before Station Square Blvd.

The parking lot has three payment collection methods: a pay by plate kiosk, several “short term” parking meters, and a coin slot kiosk. Since all other LPA parking lots rely on the pay by plate kiosks, the coin slot kiosk (and associated stall signage) could be retired and removed. Additionally, the meters could be upgraded to accept electronic payment, or removed entirely and replaced with pay by plate kiosks to be consistent with other LPA lots.

Recommendations:

1. Complete annual inspections.
2. Crack cleaning and sealing should be completed (and addressed at least every two years).
3. Replace missing wayfinding sign at the Station Square Blvd & Pennbrook Parkway intersection.
4. Consider upgrades to the ADA parking facilities to improve pedestrian access.
5. Consider adding or relocating another wayfinding sign along northbound Church Road before Station Square Blvd.
6. Consider retiring and removing the coin slot kiosk and associated stall numbering signage.

7. Consider upgrading the "short term" parking meters to accept electronic payment or replace with pay by plate kiosks.
8. Lighting should be inspected monthly and repaired when necessary.

Madison Street Lot

Pavement: The pavement is in good to very good condition and no major maintenance is anticipated within the next 5 years.

Drainage: Drainage issues such as ponding, evidence of ponding, or malfunctioning stormwater systems were not observed.

Lighting: The parking lot has adequate lighting.

Access Points and Circulation: Parking lot access is adequate.

Pedestrian access: Pedestrian access is adequate. There are three (3) ADA parking spaces situated at strategic points throughout the parking lot which is sufficient for a lot of this size. The ADA spaces all have direct curb ramp access to the sidewalk. The sidewalk provides strong connections toward the local sidewalk network and the downtown district.

Signage, Pavement Markings, and Meter Equipment: Signage, pavement markings, and meter equipment are all in adequate condition. The challenge we noted at this lot are the time limits. There are 2-hour parking signs prominently installed throughout the lot. These signs contradict time limits shown on the payment kiosk, which allows up to four hours. Furthermore, there is a two-hour free "lunch parking" period, which means users can pay for six hours in at the kiosk. Consideration should be given to replacing these signs with "Pay at Kiosk" signage and allow the kiosk to dictate the maximum limits. Although the signs direct users to pay at the kiosks, we received feedback that these signs were misleading as a quick glance makes it appear that the parking is free and limited to two hours.

Recommendations:

1. Complete annual inspections.
2. Consider replacing all 2-hour parking signs with "Pay at Kiosk" Signs.
3. Lighting should be inspected monthly and repaired when necessary.

Walnut Street Lot

Pavement: The parking lot was repaved in 2019. The pavement is in good to very good condition and no major maintenance is anticipated within the next 5 years.

Drainage: Drainage issues such as ponding, evidence of ponding, or malfunctioning stormwater systems were not observed.

Lighting: The parking lot has adequate lighting.

Access Points and Circulation: Vehicle access and circulation is satisfactory. The lot is accessible from both Main Street and 2nd Street and the drive aisle is wide enough to support two-way traffic.

Pedestrian access: There are two (2) ADA parking spaces near Main Street which is an ideal location for ADA spaces and sufficient number for a lot of this size. The two (2) ADA spaces do not provide loading/unloading zones which do not comply with current ADA guidelines. **It is important to note that the LPA has not undertaken any activity at this location that *triggers* ADA upgrades,** although updates to the ADA facilities here could be considered to improve

pedestrian access. The parking lot would likely lose one (1) parking space to provide conforming loading/unloading areas. An ADA ramp could be added to connect the loading/unloading area directly with to the sidewalk. Internally, the sidewalk provides strong connections toward the local sidewalk network, and the downtown district. Pedestrian access is adequate, although ADA upgrades could be considered to further improve access.

Signage, Pavement Markings, and Meter Equipment: Signage, pavement markings, and meter equipment are adequate with one exception. There is a hand-written sign that states: "The 12 unmetered spaces are for residents of 19.21 W. Main Street Only." Since the meters have been removed and all paid parking is conducted via the pay per plate kiosk, this sign is confusing. Furthermore, the hand drafted sign does not match the signing themes currently in use at this and all other LPA lots. Consideration should be given to removing this sign and clearly delineating the 12 reserved spaces. This could be done with a combination of pavement markings and new "Reserved Parking" signs on the existing meter posts. Finally, there is stall number signage that is now obsolete and could be removed for clarity.

Recommendations:

1. Complete annual inspections.
2. Consider removing hand written sign and clearly delineating the 12 reserved parking spaces.
3. Consider removing the obsolete stall numbering signage.
4. Consider revising the ADA parking spaces to include a loading/unloading area and curb ramp that connects directly to the sidewalk.
5. Lighting should be inspected monthly and repaired when necessary.

West Main Street Lot

Pavement: The parking lot exhibits evidence of aged pavement in fair condition. Crack cleaning and sealing was completed in 2019. Some transverse cracking and longitudinal cracking were observed. Inspection and maintenance procedures outlined below should be followed to extend the effective service life of the pavement.

Drainage: Drainage issues such as ponding, evidence of ponding, or malfunctioning stormwater systems were not observed.

Lighting: The parking lot has adequate lighting.

Access Points and Circulation: The vehicle access point is fair. This lot is challenging for visitors to access because the single access point is on Susquehanna Avenue which is one-way toward Main Street. The Borough is currently considering revising Susquehanna Avenue to a two-way configuration, which would significantly improve access to the parking lot. The parking lot has a single access and a dead end, which means users may have to back out or use k-turns to exit the lot. Circulation issues were not observed.

Pedestrian access: There is one (1) ADA parking space near Main Street which is an ideal location and sufficient number for a lot of this size. The ADA space is wide enough to provide a loading/unloading zone, however it is not presently striped this way. **It is important to note that the LPA has not undertaken any activity at this location that *triggers* ADA upgrades,** although ADA parking space could be restriped designate the parking space and loading/unloading area and conform with modern guidelines to improve pedestrian access. An ADA ramp could be added to connect the loading/unloading area to the sidewalk.

Signage, Pavement Markings, and Meter Equipment: Signage, pavement markings, and meter equipment are adequate. Each parking stall is numbered which is no longer necessary with the new parking meter kiosks.

Recommendations:

1. Complete annual inspections.
2. Crack cleaning and sealing should be completed (and addressed at least every two years).
3. Support the Borough's initiative to return Susquehanna Ave to a two-way configuration.
4. Cover or allow the numbered stall pavement markings to fade in order to avoid confusion with the current meter equipment (which requires license plate entry).
5. Lighting should be inspected monthly and repaired when necessary.

Vine Street Lot

Pavement: The parking lot pavement is in good condition. Crack cleaning and sealing was completed in 2019. Some transverse cracking, longitudinal cracking, and limited alligator cracking were observed. Inspection and maintenance procedures outlined below should be followed to extend the effective service life of the pavement.

Drainage: Drainage issues such as ponding, evidence of ponding were not observed. The rain garden island is in need of maintenance. The outlet structure could not be observed and is likely covered and in need of cleaning. Excess material and debris should be removed. The riprap along the curb cut should be replaced.

Lighting: The parking lot has adequate lighting.

Access Points and Circulation: The vehicle access points are very good. The parking lot has a two access points and good internal vehicle circulation.

Pedestrian access: There are two (2) ADA parking spaces with a loading/unloading area which is a sufficient number for a lot of this size. **It is important to note that the LPA has not undertaken any activity at this location that *triggers* ADA upgrades,** although a curb ramp and direct connection to the sidewalk along the Wood-Vine Connector S-Bend could be considered to improve pedestrian access.

Signage, Pavement Markings, and Meter Equipment: Signage, pavement markings, and meter equipment are adequate. Each parking stall is numbered which is no longer necessary with the new parking meter kiosks.

Recommendations:

1. Complete annual inspections.
2. Crack cleaning and sealing should be completed (and addressed at least every two years).
3. Cover or allow the numbered stall pavement markings to fade in order to avoid confusion with the current meter equipment (which requires license plate entry).
4. Consider upgrades to the ADA parking facilities to improve pedestrian access.
5. Lighting should be inspected monthly and repaired when necessary.

Cost Estimates

I. The LPA should continue to budget annually as follows:

1. Annual Inspection (6 Lots) ..... $3,000.00 ($500.00 per lot)
2. Annual Maintenance* (6 Lots)..... $6,000.00 ($1,000.00 per lot)

3. Total.....$9,000.00 per year

*Annual maintenance includes lighting maintenance, minor repairs, replacement of signs, graffiti removal, etc. Winter and lawn maintenance are not included in this estimate.

II. Additional work to maintain effective lots and extend the effective service life of the pavement:

1. 9th Street Train Station Lot
   a. Crack cleaning and joint sealing..... $3,000.00
   b. Repaint all pavement markings $6,000.00
2. Church Road Lot
   a. Crack cleaning and joint sealing..... $4,000.00
   b. Replace missing wayfinding sign..... $1,000.00
3. Madison Street Lot
   a. No work necessary
4. Walnut Street Lot
   a. No work necessary
5. West Main Street Lot
   a. Crack cleaning and joint sealing..... $2,500.00
6. Vine Street Lot
   a. Crack cleaning and joint sealing $2,500.00

7. Total.....$19,000.00

III. Optional work to improve access and signage:

1. 9th Street Train Station Lot
   a. No work necessary
2. Church Road Lot
   a. ADA Upgrades..... $10,000.00
   b. Additional wayfinding..... $3,000.00
   c. Retire coin kiosk & signage $3,000.00
   d. Parking meter upgrades..... To Be Determined
3. Madison Street Lot
   a. Replace all 2-hour signs $1,500.00
4. Walnut Street Lot
   a. Delineate reserved spaces $1,500.00
   b. ADA Upgrades..... $5,000.00
5. West Main Street Lot
   a. No work necessary
6. Vine Street Lot
   a. ADA Upgrades..... $5,000.00

7. Total.....$29,000.00

Parking Management Recommendations

At this time the Lansdale Parking Authority (LPA) does not operate as a traditional parking authority and only supervises a few enforcement staff while all functions are performed by Borough supervised employees. In order to more efficiently operate as a financially independent and self-sufficient entity, we recommend bringing all parking and parking enforcement activities under the umbrella of the LPA. This does not mean various Borough departments cannot provide these services, it just means the staffing, schedule, duties, and labor hours should all fall under the LPA's management.

Since individual municipal parking components and facilities are rarely financially self-sufficient, best practices dictate that the system as a whole should finance all components in order to best utilize all of the infrastructure in the most efficient manner possible. Operating a parking system without a synchronized enforcement component often leads to unsuccessful parking management plans. Therefore all enforcement policies including the hours of enforcement, fines, and transition policies should be fully managed by the LPA in order to provide all parkers with a fair and equitable system and to encourage compliance of all rules and regulations.

COVID-19 Impact on Parking

The pandemic has created several unknown factors regarding driving behavior which makes predicting parking needs more uncertain than only a few years ago. With that said, we cannot stress the importance of tracking and monitoring the parking needs on a regular basis in order to swiftly adjust parking policies as needed.

The COVID-19 pandemic has demonstrated that a considerable amount of the work that historically took place in offices or outside the home can occur remotely. Many people have discovered that they can be productive at home and enjoy the freedom of a more relaxed schedule. A study done by OwlLabs outlines some remote work statistics and trends during the COVID-19 pandemic including the following:

- 1 in 2 people won't return to jobs that don't offer remote work after COVID-19 pandemic
- 81% of respondents think their employer will support remote work after COVID-19 pandemic
- After COVID-19 pandemic, 80% expect to work from home at least 3x/week
- Most people expect work from home arrangements will continue to be an option

The post COVID-19 pandemic downtown entertainment and dining parking demand in the Borough will likely continue to rebound robustly. People will want to take advantage of the many dining venues and there will be more patrons. In addition, downtown loading / pickup zones, which were vital to the survival of downtown restaurants and retail establishments during the pandemic, will continue to be vital. As such, consistent parking enforcement of these zones and the downtown will be critical.

As illnesses decrease and workplaces and businesses reopen, offices along major transit corridors have a more challenging road to recovery given the need to commute on public transit. Fortunately, the current fuel crisis has driven fuel costs upward resulting in an increased interest in public transit. Meanwhile, suburban, or out-of-town locations where workers typically drive will likely resume something approaching normal operations much more quickly. Pre COVID-19 pandemic, companies were putting more people in less space resulting in increased demand for parking. However, Work from Home (WFH) policies and the desired social distancing could result in lower peak parking demand compared to pre COVID-19 pandemic parking demand levels.

Additionally, WFH policies have completely changed the role of residential parking within a downtown district. Pre-pandemic, parking managers could easily issue a parking permit for a resident to park during the evening and weekend hours with the assumption that most residents would be gone before the employee permit holder arrives. NOW, many of those residents, especially those with a higher income, are either working from home full-time or part-time. As such, many of those parking spaces are full all day long and they are not turning over to accommodate other users. Again, the parking industry is operating in a fluid state at this time. As behavior and policies evolve, so will driving patterns and so will the ability to better predict and manage the finite resources available. Again, tracking, monitoring, and adjusting is critical at this time.

Benchmark Rate Analysis

While the rate structure in Lansdale is in line with other peer municipalities, the rates do not follow the industry prescribed best practices in that they encourage and incentivize the use of on-street parking over off-street parking. At this time, it is less expensive for a user to park in an on-street space than it is for them to park in one of the off-street parking lots. For that reason, we recommend revising the rate structure to encourage users, through pricing, to utilize the off-street lots. By distributing more of the demand into the off-street parking facilities, convenient on-street parking will become available for use by short-term, high turnover users. Not only does this allow for those parking spaces to serve more users, it discourages long-term patrons such as merchants, employees, and residents from parking in those areas all day. Additionally, adjusting the rate structure so that the on-street parking rates are the highest, followed by the off-street lots, and then the off-street garages, motorists are discouraged to cruise the streets in search of a low-cost on-street parking space.

Peer Municipality Parking Rate Comparison

Municipality	2021 Population	On-Street Rates	Time Restrictions	Off-Street Rates
Lansdale	17,867	Free	2 hours	$1.00/day; $0.50/6hrs; $0.25/3hrs; $1.00/hr
Phoenixville	16,992	$1.00 - $2.00/hr	1 hour	$15/month; $35/Quarter; $125/year
Ambler	6,491	$0.25/hr	2 hours	$1.00/day
Conshohocken	8,039	$0.70/hr (via ParkMobile App)		$0.95/hr (via ParkMobile App)
Doylestown	8,238	$0.50 - $1.00/hr	3hr; 10hr	$0.50/hr; $1.50/hr; $60/6 months

Source: THA Consulting, 2022

Parking Rate Recommendations

The following is one example of a pricing strategy that could be implemented by the LPA. Please note, the LPA can implement any phase for any tier. We just recommend following industry best practices of always pricing the on-street parking spaces at a higher rate than the off-street parking areas.

The initial phase in shifting to a fully paid and managed parking system is the introduction of time-limits. We believe Lansdale is beyond this phase but want to recognize that by revising the rate strategy, it may be necessary to shift from paid to free off-street parking in some areas.

	Phase I					
	On-Street			Off-Street		
Duration (hours)	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
0-1	Free	Free	Free	Free	Free	Free
1-2	Free	Free	Free	Free	Free	Free
2-3	Free	Free	Free	Free	Free	Free
3-4	Max 3 hr.	Free	Free	Free	Free	Free
4-5	Max 3 hr.	Free	Free	Free	Free	Free
5-6	Max 3 hr.	Free	Free	Free	Free	Free
6-8	Max 3 hr.	Max 6 hr.	Free	Free	Free	Free
8-16	Max 3 hr.	Max 6 hr.	Max 8 hr.	Free	Free	Free
Monthly Permit	Not Implemented					

Phase II usually allows a municipality to introduce an employee permit to free up additional on-street parking areas for customers and visitors. This phase typically includes some free off-street parking options for those users and/or employees who may be price sensitive.

	Phase II					
	On-Street			Off-Street		
Duration (hours)	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
0-1	Free	Free	Free	Free	Free	Free
1-2	$1.00	Free	Free	Free	Free	Free
2-3	$2.50	$1.50	Free	$2.00	$1.00	Free
3-4	$4.50	$1.50	Free	$2.00	$1.00	Free
4-5	$6.50	$3.00	$2.00	$2.00	$1.00	Free
5-6	$8.50	$3.00	$2.00	$2.00	$1.00	Free
6-8	Max 6 hr.	Max 6 hr.	$2.00	$2.00	$1.00	Free
8-16	Max 6 hr.	Max 6 hr.	Max 8 hr.	$2.00	$1.00	Free
Monthly Permit	N/A			$15.00	$10.00	Free

The third phase consists of a fully paid system with very limited grace periods of free parking. This phase is typically associated with a downtown area that is mature and active.

	Phase III					
	On-Street			Off-Street		
Duration (hours)	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
0-1	$1.50	$1.00	$2.00	Free	Free	Free
1-2	$3.00	$2.00	$2.00	$2.00	$1.00	Free
2-3	$4.50	$3.00	$2.00	$3.00	$2.00	$1.00
3-4	$6.50	$3.00	$2.00	$3.00	$2.00	$1.00
4-5	$8.50	$3.00	$2.00	$3.00	$2.00	$1.00
5-6	$10.50	$3.00	$2.00	$3.00	$2.00	$1.00
6-8	Max 6 hr.	Max 6 hr.	$2.00	$6.00	$4.00	$1.00
8-16	Max 6 hr.	Max 6 hr.	Max 8 hr.	$6.00	$4.00	$1.00
Monthly Permit	N/A			$20.00	$15.00	$10.00

Downtown Business Overlay District Parking Requirements

Our team reviewed Lansdale's parking requirements and noted within Article XXXV, Section 405-3505 it states:

> *There shall be no minimum off-street parking requirement in the Downtown Business Overlay District unless the size of the principal building area is greater than or equal to 20,000 square feet in size …*

While the above ordinance encourages growth, density, development, and redevelopment within the prescribed area, it also places the burden of providing parking spaces onto the municipality. In other words, all new development projects would rightly assume that the LPA or Borough would provide sufficient parking resources to support any new land uses and businesses that open within that district. With that, any parking shortages experienced by new businesses would be at the fault or failure of the municipality. Going one step further, existing businesses would also expect the Borough to continue to provide parking to meet their needs as well.

For many municipalities, the task of providing parking to support development/redevelopment is usually easy with the first few projects, however, there usually comes a point in time where the municipality's parking resources are operating at or near capacity and they are unable to support additional users. At this time, the LPA only controls four (4) off-street parking facilities with just over 200 parking spaces. While there is still surplus capacity in those facilities, we believe that it would only take 1-2 successful projects to diminish that surplus. We do understand the on-street parking infrastructure is also an asset as well that can be utilized to meet demand, but those parking areas are best suited for high-turnover users vs. employees or residents.

We recommend that the LPA explores modifying the ordinance requirements to require parking within the district but including a provision that the parking requirement can be met through participation in a Payment In Lieu Of Parking (PILOP) program which includes the payment of a fee in lieu of providing the required number of off-street parking spaces. PILOP fees can be pooled together and used to fund new (shared) parking facilities without burdening taxpayer funds to subsidize parking. To encourage growth, we recommend phasing in the parking requirements over the next 3-5 years as it will incentivize developers to start projects sooner versus waiting for other projects to occur. PILOP fees range by municipality and

vary depending on the cost/value of land, availability of parcels, and the type of parking that will be added (structured vs. surface lots).

Some municipalities charge a flat one-time fee, others may offer installment plans, some also require ongoing monthly fees, and some require a combination of one or more payment types. Generally speaking, PILOP fees range from as low as $2,000 per space (in areas where land prices are low and surface parking can be added) to $30,000 per space (where land costs are higher and structured parking would be needed).

Should Lansdale implement a PILOP fee, we recommend setting a uniform fee that is high enough to pay for the anticipated parking improvements but low enough to continue to attract development/redevelopment. The Borough may also wish to incentivize specific types of businesses by funding grants or other programs to help offset the developer's cost of the PILOP fee.

As part of any PILOP program implementation, we recommend that the LPA or Borough secure parcels that are strategically located to allow for the future addition of parking as needed. Typically we recommend acquiring as many parcels as needed with the understanding that they can be used as surface parking in the short-term, expanded into structured parking if needed, or sold to a developer to increase density in the downtown.

SEPTA Parking Garage

The SEPTA Parking Garage has recently reopened after being closed by SEPTA due to the pandemic. The parking garage has 660 parking spaces and a bridge over the train tracks connecting the garage directly into the Equus development in the former Madison Lot. The LPA has an agreement with SEPTA for the use of 115 parking spaces. The LPA should engage with nearby residents and business owners to distribute passes and encourage the use of these parking spaces. This would alleviate parking congestion, particularly in the Madison Parking Lot.

Public-Private Partnerships (P3) and Extended Parking Enforcement

The LPA should continue to identify opportunities for shared-use arrangements. Opportunities where existing business parking lots can be utilized off-peak to support the Downtown business district can help alleviate parking lot congestion, particularly during the evening peak hours. The LPA could also consider extending the enforcement period at all lots until 8pm to improve turn-over, particularly in the Downtown business district.

Free Lunch Parking

The LPA offers "free lunch parking" between the hours of 12:00pm and 2:00pm. This program was established to promote access to Lansdale's business core during the lunch period. While this program was well-intentioned, it has not had a measurable impact on lunch visitors and there have been some unintended negative consequences. The Pennoni/THA Team recommends that the LPA terminates free lunch parking program over the next 30 to 60 days in order to create a more unified and equitable parking system throughout the Borough.

Based on our experience and conversations with various users, there is confusion about how and where this program is offered. Further, it is not clearly conveyed whether this program only applies to the head-in parking spaces or also to the parallel and angled parking spaces. Due to this confusion and because the

free lunch program has not significantly improved the number of lunch visitors in Lansdale, eliminating the program will ensure valuable on-street parking spaces are used by more short-term parkers.

Elimination of this program would benefit the LPA by providing a consistent user experience throughout the Borough and improve turn-over at these high-valued parking spaces. Businesses alike would benefit as the parking spaces should turn-over faster, resulting in improved available parking for customers. Finally, the elimination of the program will also result in more clarity of the parking rules when issuing citations for non-payment.

Freight House Parking Lot Metering

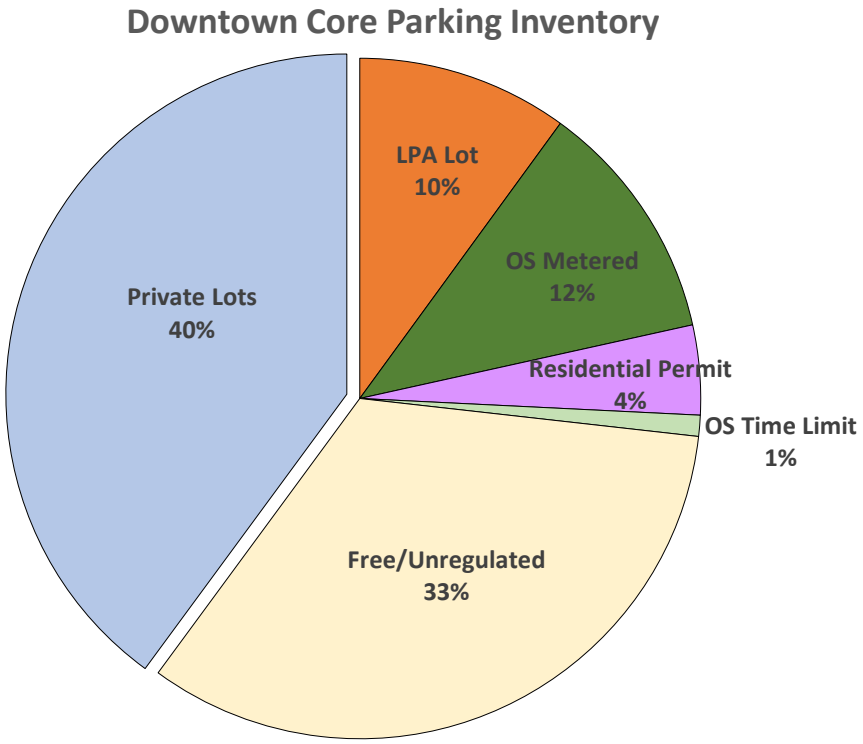
The LPA recently completed construction of an 82-space parking lot at 117 South Broad, adjacent to the Freight House building. The LPA should strongly consider metering this parking lot to provide a consistent user experience throughout the Borough. This lot should be assigned the same rates as other lots outside of the Downtown core area. The LPA should also consider increasing the fees for all lots outside of the downtown core to $1 per 6 hours. The $0.50 increase would help account for the recent and significant price increases as a result of inflation to cover the long-term maintenance, as well as credit card swipe fees.

Downtown Core Area Parking Capacity Analysis

At the request of the LPA, our team performed a second mini-analysis of the parking conditions within a 20-block area which is defined as the "Downtown Core Area." A map of the smaller sub-area is illustrated below along with the corresponding Block identifiers which were used solely for the purpose of collecting data as part of this study effort.

There are 799 parking spaces located on- and off-street within the Downtown Core area. Of those, 319 spaces are located in private parking lots, 80 spaces are located in LPA off-street parking lots, and the remaining 400 parking spaces are located on-street (metered, residential permit, time regulated, or free/unregulated). The following table and graph outline the breakdown between the type of parking available.

Parking Type	Parking Inventory
LPA Lot	80
OS Metered	92
Residential Permit	34
OS Time Limit	8
Free/Unregulated	266
Private Lots	319
Total	**799**



As noted above, most of the Downtown Core area parking is located in private off-street surface parking lots (40%), followed by 33% of the parking spaces located on-street without any time restrictions or payment regulations. Of the on-street parking spaces, only 17% of them are actually regulated in the form of metered, 12%, residential permit use, 4%, or with a time restriction, 1%. There is an opportunity to distribute parking demand in high demand areas by regulating additional on-street parking spaces and utilizing rate and/or time restrictions to encourage long-term users to park in other locations.

Our team collected parking utilization data on a weekday as well as a weekday evening. The parking demand from Wednesday, August 11, 2021 and Friday, April 8, 2022 are shown below.

		PARKING DEMAND								
		WEDNESDAY, AUGUST 11, 2021						FRIDAY, APRIL 8, 2022		
ing Type	Parking Inventory	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p	5p-6p	6p-7p	7p-8p
LPA Lot	80	30	27	44	25	39	42	72	72	72
OS Metered	92	20	24	38	36	50	46	75	78	74
Residential Permit	34	14	12	14	12	13	16	14	15	16
OS Time Limit	8	0	0	0	1	1	2	4	3	4
Free/Unregulated	266	81	85	97	89	82	89	121	119	101
Private Lots	319	28	39	56	59	79	50	91	107	95
Total	**799**	**173**	**187**	**249**	**222**	**264**	**245**	**377**	**394**	**362**

The highest observed demand in the Downtown Core occurred between 6pm and 7pm on Friday, April 8, 2022 when 394 vehicles were observed parked in the 799 parking spaces. A breakdown of the occupancy by day and time is shown below.

	PARKING OCCUPANCY								
	WEDNESDAY, AUGUST 11, 2021						FRIDAY, APRIL 8, 2022		
ing Type	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p	5p-6p	6p-7p	7p-8p
LPA Lot	38%	34%	55%	31%	49%	53%	90%	90%	90%
OS Metered	22%	26%	41%	39%	54%	50%	82%	85%	80%
Residential Permit	41%	35%	41%	35%	38%	47%	41%	44%	47%
OS Time Limit	0%	0%	0%	13%	13%	25%	50%	38%	50%
Free/Unregulated	30%	32%	36%	33%	31%	33%	45%	45%	38%
Private Lots	9%	12%	18%	18%	25%	16%	29%	34%	30%
Total	**22%**	**23%**	**31%**	**28%**	**33%**	**31%**	**47%**	**49%**	**45%**

When looking at the parking occupancy, the utilization of the LPA lots (W. Main Lot and Madison Avenue/Madison Street Lots) reaches 90% during the evening hours. Likewise, the on-street metered parking areas regulated by the LPA reach 85% occupied at the peak hour between 6pm and 7pm. This only occurred on one day of data collection and there are likely days where occupancy reaches 100%, further supporting the need for the LPA to pursue additional parking supply in the Lansdale Downtown Core Area. Industry best practices recommends a maximum occupancy rate of 85% to ensure users can quickly find a vacant parking space without the need to circle a facility or block multiple times. Given the imbalance of utilization between the LPA lots/On-street metered areas and the other On-Street Free/Unregulated spaces, there is an opportunity to improve the parking conditions in the busiest areas by distributing demand to lower utilized parking areas.

Our last analysis focused on evaluating the parking utilization by Block. As expected, based on our field observations, parking demand in blocks 30 and 45 were the highest and parking in this area was more difficult than other blocks in the core area. We understand there was an intentional effort to redevelop this area and due to those efforts, the businesses are successful and therefore the demand for parking is higher than in other areas of downtown. A summary of the parking demand and occupancy by block is shown in the following table.

		PARKING DEMAND								
		WEDNESDAY, AUGUST 11, 2021						FRIDAY, APRIL 8, 2022		
BLOCK	Parking Inventory	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p	5p-6p	6p-7p	7p-8p
30	63	23	19	38	13	27	33	58	60	59
40	64	13	3	5	17	19	23	50	56	48
41	58	17	16	25	18	27	13	32	28	29
42	34	2	2	9	6	7	5	8	7	8
43	76	2	8	16	12	20	7	8	10	7
44	33	1	6	13	7	10	10	11	16	11
45	61	12	18	28	25	35	36	55	57	54
52	54	9	10	9	11	12	14	18	16	10
53	20	3	4	4	2	2	2	3	3	2
54	52	10	13	14	11	8	5	14	10	8
55	50	2	4	5	6	1	11	1	10	7
56	39	21	17	18	17	17	19	29	26	27
57	9	4	4	5	5	3	0	3	2	1
58	25	8	10	6	8	10	16	8	11	12
59	43	7	9	9	9	9	8	11	13	11
60	14	9	8	7	5	7	8	10	12	12
61	31	14	19	19	26	23	19	27	23	25
62	8	0	0	0	0	0	0	3	6	5
63	10	5	3	5	5	5	3	8	6	6
64	55	11	14	14	19	22	13	20	22	20
Total	**799**	**173**	**187**	**249**	**222**	**264**	**245**	**377**	**394**	**362**

	PARKING OCCUPANCY								
	WEDNESDAY, AUGUST 11, 2021						FRIDAY, APRIL 8, 2022		
BLOCK	7a-9a	9a-11a	11a-1p	2p-4p	4p-6p	6p-8p	5p-6p	6p-7p	7p-8p
30	37%	30%	60%	21%	43%	52%	92%	95%	94%
40	20%	5%	8%	27%	30%	36%	78%	88%	75%
41	29%	28%	43%	31%	47%	22%	55%	48%	50%
42	6%	6%	26%	18%	21%	15%	24%	21%	24%
43	3%	11%	21%	16%	26%	9%	11%	13%	9%
44	3%	18%	39%	21%	30%	30%	33%	48%	33%
45	20%	30%	46%	41%	57%	59%	90%	93%	89%
52	17%	19%	17%	20%	22%	26%	33%	30%	19%
53	15%	20%	20%	10%	10%	10%	15%	15%	10%
54	19%	25%	27%	21%	15%	10%	27%	19%	15%
55	4%	8%	10%	12%	2%	22%	2%	20%	14%
56	54%	44%	46%	44%	44%	49%	74%	67%	69%
57	44%	44%	56%	56%	33%	0%	33%	22%	11%
58	32%	40%	24%	32%	40%	64%	32%	44%	48%
59	16%	21%	21%	21%	21%	19%	26%	30%	26%
60	64%	57%	50%	36%	50%	57%	71%	86%	86%
61	45%	61%	61%	84%	74%	61%	87%	74%	81%
62	0%	0%	0%	0%	0%	0%	38%	75%	63%
63	50%	30%	50%	50%	50%	30%	80%	60%	60%
64	20%	25%	25%	35%	40%	24%	36%	40%	36%
Total	**22%**	**23%**	**31%**	**28%**	**33%**	**31%**	**47%**	**49%**	**45%**

APPENDIX A – SITE PHOTOS

9TH STREET TRAIN STATION LOT


SEPTA
9TH STREET
TRAIN
STATION
RESERVED
PARKING

CHURCH ROAD LOT


P
CHURCH
ROAD
LOT
Lansdale Parking Authority


CHURCH ROAD
MUNICIPAL COMMUTER PARKING LOT
LANSDALE PARKING AUTHORITY
NO OVERNIGHT OR LONG TERM PARKING AVAILABLE


ONLY


2427
2427

MADISON STREET LOT

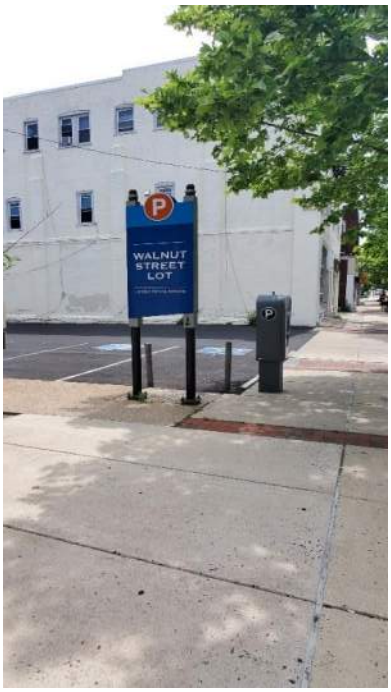

15 MINUTE PARKING
LEASE


RESERVED PARKING
2 HOUR PARKING


LEASE

WALNUT STREET LOT

22 Parking Spots
7,670 Sq. Ft


WALNUT
STREET
LOT


2430


2430
STALL
21 22


WALNUT
STREET
LOT
Your
Local
Florist!

WEST MAIN STREET LOT

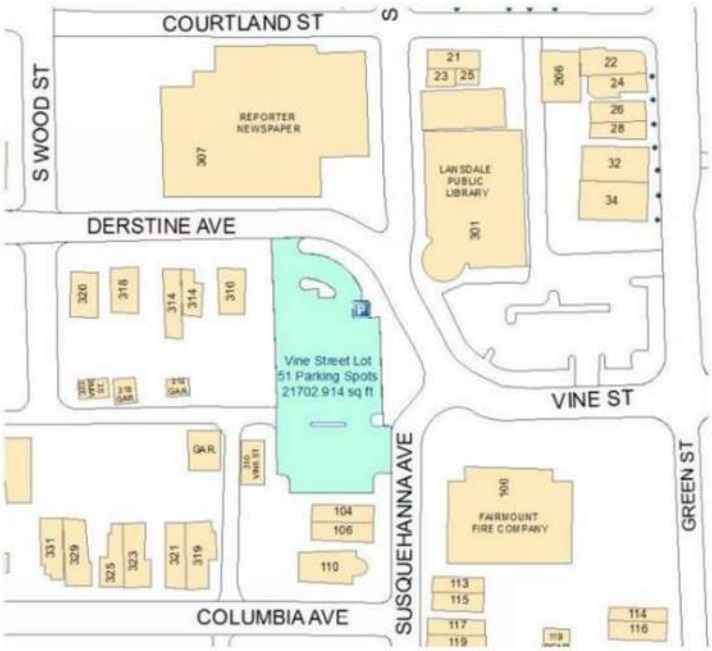
15 Parking Spots
5,129 Sq. Ft


P
WEST
MAIN ST
LOT
Lansdale Parking Authority


INSTRUCTIONS
2429


ZONE #
2429
ParkMobile
Pay by App
Parking

VINE STREET



51 Parking Spots
21,703 Sq. Ft


P
VINE STREET
LOT