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1 INTRODUCTION

A. PURPOSE AND NEED FOR STUDY

In the Fall of 2009, RKG Associates, Inc. was retained by the Crater Planning District Commission to analyze the market and tax revenue impacts associated with the proposed development of a 1,000-unit Army lodging facility inside the gate at Fort Lee, VA. This new facility is projected to come on line by September 2011. The purpose and need of the study was defined by the host cities of Petersburg, Colonial Heights, and Hopewell and the counties of Dinwiddie, Prince George, and Chesterfield. The municipal impacts associated with this study include hotel/motel occupancy taxes, hotel/motel sales tax, and retail sales taxes.

In addition to the municipal impacts RKG was retained to analyze the market impacts of the proposed lodging facility on the region's private hotel/motel market. During August of 2009, Fort Lee Garrison Command presented the results of an Environmental Assessment of the temporary living quarters (TLQ), which relied on an earlier analysis prepared by RKG Associates and presented in the Fort Lee Growth Management Plan dated February 2008. This limited analysis was not part of the Fort Lee Growth Management Plan scope of services, but was prepared once it was apparent that the TLQ construction funding was in jeopardy and considerable market opportunities might accrue to the region's private hotel/motel market.

The hotel/motel market impact analysis examines: (1) changes in hotel/motel annual room night supply, (2) changes in projected annual room night demand by all market segments, and (3) changes in annual occupancy rates based on changes in room night supply and demand between 2009 and 2015. RKG Associates also prepared an impact analysis associated with the 17 Lodging Success Program (LSP) hotels that are under contract to provide hospitality services to Fort Lee-related personnel, in all its forms. The LSP hotel analysis examines how changes in Fort Lee demand over the 2009-2015 projection period will impact various hotel tiers. Hotel tiers in this context are categorized by their general proximity to Fort Lee. RKG Associates created a “gravity model” that distributed future hotel room night demand by a number of proximity, quality, and price factors.

During the course of this analysis, a loosely-formed coalition of hotel operators and small business owners raised concerns about the potential impact that the proposed TLQ would have on the private hotel/motel market. These merchants are collectively concerned that constructing 1,000 new lodging rooms on-post will effectively pull hotel and retail spending from private businesses. In addition, the new facility would be constructed following a period of rapid expansion, which has occurred over the past several years. While RKG was not retained by the hotel coalition and did not meet with the group’s leadership, interviews were conducted with a number of independent hotel operators to understand their concerns and to obtain information about their past and current operations.

To the extent possible, RKG has attempted to document all the future demand assumptions made by the Army relative to future training activities at Fort Lee. Unfortunately, it is very difficult for the Army to truly know its future training loads several years in the future. Undoubtedly, these loads will fluctuate with changing needs and projections made in 2009 may or may not come to fruition. Given these limitations, RKG has taken a conservative approach to this analysis.
The impact analysis consists of the following sections:

- Section 1 – Introduction
- Section 2 – Executive Summary
- Section 3 – Lodging Market Analysis
- Section 4 – Lodging Success Program Analysis
- Section 5 – Consumer Spending Analysis
- Section 6 – Fiscal Impact Analysis
EXECUTIVE SUMMARY

A. BACKGROUND

The Lodging Success Program (LSP) at Fort Lee began in 2002, at which time there was one participating hotel. By 2009, the number had increased to 15, and is currently at 17 (totaling 1,818 rooms). The program was begun as a cost-saving measure by the Army and is currently in operation at 19 different bases around the country. The LSP process of contracting hotel stays begins with the Army’s Family and Morale, Welfare and Recreation Command (FMWRC) issuing a request for hotels to bid on a military base’s off-post lodging needs for the coming fiscal year. Such needs often arise where the supply of on-post lodging is unable to meet the amount of demand generated by temporary stays. In years past within the Fort Lee region, bidding hotels would state their number of available room nights and FMWRC would assign some portion of that figure to the hotels selected to participate. The selection process reflected minimum standards established by the Garrison Command Office and FMWRC.

In order to participate in the program, LSP hotels must offer an 8% discount from the current per diem rate as well as a $2 per room night rebate to FMWRC (previously $4 per night). Therefore, participating hoteliers must exchange certainty of room night capture and a discounted room rate in order to benefits of this stream of visitors. However, the LSP is the only official way for hotels to participate in serving these soldiers since they are required to stay at LSP hotels.

A number of changes that occurred related to the LSP process for FY 2010 have caused a shift in the off-post lodging landscape around Fort Lee. The following itemized list reflects those changes that have most impacted distribution of room nights to the LSP-selected facilities (in no particular order).

- Beginning in FY 2010, the FMWRC required Fort Lee Study Region bidders with a list of scheduled courses that are expected to require lodging (referred to as the “J-3” in the bidding contract), as well as their duration and number of students. The bidders then had to submit their room availability relative to the J-3, essentially outlining the room night demand they would like to service. Those hotels which meet the program’s requirements (which include minimum standards of distance to post, security, functionality, and amenities) are then apportioned a share of the demanded room nights by the FMWRC. The LSP utilizes an indefinite delivery, indefinite quantity (IDIQ)-style contract, meaning that no assurance is made regarding the number of hotel stays actually delivered, but a minimum payment equal to 10% of the stays allocated to a hotel are guaranteed by the Army whether they are fulfilled or not by the end of the fiscal year. The J-3 used to contract the hotels for FY 2010 included some errors, including student loads that would actually be housed on-post, as well as courses that would be held on a different post besides Fort Lee.1 A correct J-3 is currently being assembled.2 It is possible that this discrepancy may have caused those parties involved to overestimate the demand for hotel stays, thereby causing participating hotels to also overestimate the amount of stays that they might capture. This miscommunication has bred

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1 Email correspondence from a Program Management Specialist at FMWRC, 16 November 2009.
2 Email correspondence from Traci Hackley, General Manager at Comfort Inn and Suites, Prince George, 6 November 2009.
confusion and mistrust from the local hotel market and provided much of the framework for questions related to the validity of class load projections

- **The Army Lodging's Central Reservation Center (CRC) began providing the reservation service for LSP stays, a task formerly performed by Fort Lee's Lodging Office.** Soldiers receive their assigned hotel as part of their welcome letter from Fort Lee, but this assignment is not mandatory. Historically, Fort Lee Lodging has guided students to their assigned hotels to promote class unity and best meet the contractual obligations with the LSP hotels. However, anecdotal data indicate the CRC does not operate similarly. Located in Huntsville Alabama, the CRC provides reservation services for any hotel in the LSP program, without preference for the assigned facility. This provides the soldier with the option to stay somewhere different than where assigned. The compulsory nature of the previous method provided a relatively even disbursement of room nights among the participating hotels. It has been brought to our attention that visiting soldiers would not likely be familiar with the area, and generally choose a hotel within close proximity to Fort Lee (this assumption has been validated by interviews with local hoteliers). This new reservation process favors those hotels located most closely to the Fort, and puts those farther away at a disadvantage by shifting the concentration of stays to hotels closest to the Fort.

- **The Army moved away from central billing to individual credit card purchasing.** In the past, lodging costs for visiting soldiers was centrally billed and required the hotels to submit invoices for reimbursement. This system eliminated the potential for non-LSP hotels to house these soldiers, as oversight was held to a handful of facilities. However, the self-pay system requires oversight of thousands of individual reimbursement expenses. As such, the ability to monitor the final destination of the soldiers is much more onerous. In addition, soldiers are not tied to reserving through the CRC, as hotels are not involved in the final payment process. Simply put, hotels are not responsible for collecting money from the Army, and have less incentive to accommodate a soldier booking outside the CRC process.

- **Interviews with local hoteliers suggest that not all soldiers required to utilize the CRC for their stay are doing so, despite the instructions provided with the notification letter.** Instead, some soldiers are making their own reservations and bypassing the CRC. While some of these soldiers attend the hotel assigned to them, it was reported that there are instances where soldiers select other LSP facilities, non-LSP facilities and even venture into short-term apartment rentals. Some reports indicate soldiers are changing hotels during their stay in order to maximize their hotel benefits program rewards or to find lodging more suitable to their tastes. It is believed that soldiers are reimbursed even if not booking through the CRC and/or staying at an LSP-approved hotel as a result of the complexity of tracking each soldier individually. In any case, these stays are not reported to FMWRC nor are the rebates being sent.

The current system no longer evenly distributes LSP hotel stays among the contract hotels and anecdotal evidence indicates that some LSP stays are occurring in non-LSP hotels. In addition, the exact location and number of soldiers staying off-post as part of the LSP program is unclear, causing concern among the hotel community that the Army is not delivering the expected number of stays to the Fort Lee market (discussed in the previous chapter). In December 2009, RKG submitted a FOIA request through Congressman Forbes (VA) office requesting data from FMWRC that would detail where soldiers booking through the CRC are staying. However, this information was not provided to the Consultant prior to the deadline of this project.

These factors have culminated in a situation that no longer evenly distributes LSP hotel stays, with reports indicating some of these stays are being captured by non-LSP hotels. In addition, the exact location and number of soldiers staying off-post as part of the LSP program is unclear, causing concern
among the hotel community that the Army is not delivering the expected number of stays to the Fort Lee market (discussed in more detail throughout this analysis). The Consultant submitted a formal FOIA request through Congressman J. Randy Forbes (4th Virginia) office on December 10, 2009 requesting data from FMWRDC that would detail where soldiers booking through the CRC are staying. However, this information was not provided to the Consultant prior to the deadline of this project. The August announcement that the 1,000 room Temporary Living Quarters (TLQ) had received funding caused further confusion and concern within the community, since this facility will draw military stays out of the private sector and onto the Fort.

B. HOTEL MARKET ANALYSIS

The concerns related to the TLQ and reported problems with the LSP hotel stays are compounded by the impacts created by the national economic downturn and its effects on the lodging industry. The Fort Lee Study Region (see Map 3-1) lodging market historically has performed very well. Prior to 2008, market demand increased steadily bringing occupancy rates above 70% for the market as a whole. Much of this success is related to activity at Fort Lee. Hoteliers report that Fort Lee has accounted for as much as 40% to 50% of all business within the Study Region. However, the economic downturn has resulted in a net decline in market demand each year since 2007. Concurrently, the development of more than seven new hotels and a total of 756 rooms has exacerbated the decline in occupancy levels. The Consultant estimates that the 2009 occupancy rate is 58.8%, or approximately 8% below 2008 levels.

The projected expansion of class load at the Army Logistics University (ALU) will have a substantial impact on the regional market, both short-term and long-term. The projected activity level for FY2011 will result in an additional 480,000 room-nights of demand for the private sector, a 40% increase in one year. The Consultant projects regional occupancy level of more than 81% during this period. Even with the operation of the TLQ facility starting in FY2012, the net benefit to the private sector will assist in negating the impacts of the economic downturn. In short, the growth in lodging business related to operations at Fort Lee are projected to add more than 66,000 room nights of demand above current estimate levels (436,350 room nights), or a 15.1% increase.

The greatest threat to the private market is over speculation. According to the Petersburg Area Regional Tourism Corporation, there are an additional 14 hotels totaling 1,123 rooms within the development approval process that have not yet begun construction. If these facilities are developed as proposed within the timeframe stated, it will result in a 43% increase in hotel rooms within the Fort Lee Study Market since January of 2008. Simply put, the projected market demand will not be able to support that many new hotels, as the downward pressure on occupancy will create a pricing competition that will drive some facilities to failure.

It is important to note there has been concern expressed about the viability of the ALU to deliver the amount of demand projected by the Army. ALU projections indicate the average daily load (ADL) of students at Fort Lee will increase from approximately 1,000 in FY2009 to approximately 2,450 in FY2011 when all new training entities are operational on post. Based on the Consultant’s analysis, the ALU will need to deliver a minimum of 2,100 ADL once the TLQ facility is operational to maintain equilibrium with current LSP business levels for the private lodging market. Given the uncertain times our nation is still facing locally and globally, substantial changes in training needs could impact the Fort Lee Study Region lodging market. While the data provided by the ALU and the Army are the best information available at this time, the concern about future needs and the ability of the Army to meet the 2,100 average daily load threshold to avoid adverse impacts to the private market are reasonable.

3 Projections do not include numbers from the Transportation or Ordnance Corps, which did not have confirmed projections at the writing of this report.
C. LODGING SUCCESS PROGRAM IMPACTS

The combination of the growth in Fort Lee-related, private sector lodging stays combined with the unforeseen impacts of the changes to the LSP process are projected to cause a reallocation of demand within the Fort Lee Study Region. The projected net increase in LSP stays throughout the private sector will shift hotel capture for those LSP-qualified facilities closest to Fort Lee. These hotels likely will capture this new demand due to their proximity to post. As a result, some of their non-LSP business is projected to be displaced to facilities less competitive in capturing the new LSP demand.

Furthermore, the changes in the LSP reservation system and the inefficient oversight of actual stays have allowed individual soldiers to make choices in hotels, rather than follow the prescribed facility assignment. At a base level, the Central Reservations Center has noted that the reservations process has not encouraged students to adhere to their hotel assignments as diligently as had been done through Fort Lee Lodging. Further analysis revealed that soldiers have circumvented the CRC and official LSP reservation process and booked rooms independently. Data provided by current and former LSP participants indicate this has created an imbalance in room night capture within the market. Most notably, there are confirmed reports that ALU students are booking rooms at non-LSP hotel to take advantage of personal preference or brand loyalty.

While the Fort Lee Study Region lodging industry as a whole is projected to experience a net benefit as a result of the increased Fort Lee operations after the opening of the TLQ facility, individual hotel operations will be impacted differently. The uncertainty and ineffectiveness of the current LSP procedures has caused a reallocation of demand within the region. Simply put, some hotel operations have reportedly received a disproportionate share of the Fort Lee LSP business while others have experienced a net loss. Unless the reservation system is adjusted, this trend is projected to continue into the future, with a favorable outlook for the Study Region as a whole but accompanied by a loss for specific hotels.

D. CONSUMER SPENDING ANALYSIS

In addition to studying the potential impacts the TLQ facility will have on the Fort Lee lodging industry, the Consultant was retained to analyze the potential impact the proposed new commercial operations on Fort Lee will have on the private retail/service market. Simply put, the economic downturn has impacted local retail and service businesses. Given the BRAC action at Fort Lee includes the development of some new commercial venues, questions were raised as to the potential impact these businesses will have on private ventures outside the gates. To this end, the Consultant studied the current and proposed retail/service offerings at Fort Lee and the spending impacts created by the projected increases in ALU student loads both on-post (in the TLQ facility) and off-post.

In total, there is approximately 304,000 square feet of retail space currently on Fort Lee. The new development projects, including the dining facility at the TLQ, represent an increase of approximately 20,000 to 25,000 square feet, or 8% to 9% over the existing supply. The two notable commercial projects currently under construction include the new car care center complex and the renovation of the Lee Playhouse. The car care center will have multiple businesses operating on-site and is projected to be completed and open in early 2010. The project will be anchored by a Firestone car care center that will include 24 fuel pumps, several service bays and a car wash. In addition, the complex will also include a Popeye’s chicken fast-food restaurant, a Class Six store and a shoppette (convenience store). The Playhouse is currently being transformed into a facility that will be able to show movies in

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addition to hosting theater events. According to the AAFES Business Operations Manager, the movie theater will have limited operating hours due to the facility’s multiuse program.

Two other commercial projects in the pipeline are slated to begin construction soon. The first is located in the northern part of Fort Lee. This project will include a shoppette and a barber shop. According to AAFES, these businesses would be the third on-post shoppette and the fourth barber shop, respectively.

In terms of the TLQ facility, there is a proposed 300-seat dining facility to be included in the TLQ facility. Although there are no details about the operation or dining type of this facility, this new eatery likely will draw students who are staying at the TLQ.

The Consultant performed a survey of ALU students to better understand the spending habits and needs for on-post and off-post venues. Based on the findings of this effort, the new commercial space proposed on Fort Lee is relatively disproportional to the likely increase in spending related to the net personnel growth. As such, it is likely that business activity occurring both on- and off-post will experience modest levels of increased business activity due to the increase in area military personnel.

E. FISCAL IMPACT ANALYSIS

The next several years are projected to deliver millions of dollars in tax revenue to the Fort Lee Study Region municipalities. The economic impact analysis indicates that the six Crater PDC jurisdictions most impacted by the Fort Lee expansion will realize a cumulative increase in transient occupancy tax and local sales tax related to hotels stays and retail expenditures (Figure 2-1). The Region is projected to experience a one-time windfall of tax revenue of $1.4 million during FY2011 and the beginning of FY2012. This windfall ends as a result of the opening of the TLQ. At this time, the amount of transient occupancy tax (TOT) revenues and hotel-related sales tax revenues are projected to decline to a level below the peak, but above current revenue estimate levels. However, the Study Region also is projected to experience a sustained net increase in tax revenue of more than $260,000 annually as a result of the increase operations at Fort Lee accounting for the impacts of the TLQ facility.

As already mentioned, the shift in lodging demand allocation due to the increased market activity and the inefficiencies in the current implementation of the LSP has resulted in creating bigger “winners” within the Study Region in terms of net new tax revenues. The data indicate that Colonial Heights and Chesterfield County are poised to experience a larger share of this net gain over communities such as Hopewell and Petersburg. While the details of the retail sales tax revenues are not complete for a jurisdiction-level analysis, it is reasonable to assume Prince George County will benefit the most, as the County collects all on-post sales tax revenue.

Given the imminent increase in hotel stays, the most effective means by which a municipality might try to increase its projected tax revenues may be to increase its TOT rate and the length of stays that qualify for exemption. Colonial Heights serves as a prime example, utilizing an 8% rate (among the
highest) and only exempting stays of more than 90 days, while all other municipalities exempt stays of more than 30. This is significant given that approximately 90% of all LSP stays fall below 90 days, while only 20% fall below 30 days. This situation is evident in the fact that Colonial Heights only hosts four of the Study Region’s 57 hotels (7%), but is projected to capture up to 30% of collected TOT and 17% of hotel-based sales tax related to Fort Lee stays in 2012.
3 LODGING MARKET ANALYSIS

A. INTRODUCTION

This chapter provides a detailed assessment of lodging market trends and projections for an area defined as the Fort Lee Study Region. The Fort Lee Study Region includes all temporary lodging facilities within nine miles of the Fort Lee boundary (Map 3-1). This area reflects the area most impacted by Fort Lee operations, as identified and confirmed through the consultant's market research, interviews with local hotel operators and discussions with Fort Lee representatives. The results of this effort address the potential impact of the Fort Lee Temporary Living Quarters (TLQ) facility on the regional hotel market.

The analysis is divided into two sections. First, the Consultant researched past and current market trends relating to both Fort-Lee specific and private market influences. This effort established the framework for understanding potential market changes into the future. The second section details the methodology and results of the market projections calculated by the Consultant. The chapter culminates in a narrative and graphic review of the potential impacts created by the TLQ facility.

To complete this analysis, the Consultant used a variety of primary and secondary data sources. Most notably, the Consultant collected a myriad of data from the Department of the Army. Information was provided by the Family and Morale, Welfare and Recreation Command (FMWRC), the Army Logistics University (ALU), the Fort Lee BRAC Coordination Office and the Fort Lee Garrison Command Office, among others. Data also was provided by local hotel operators including those operators formerly participating in the Military Training Service Support (MTSS) and currently participating in the Lodging Success Program (LSP). Finally, the Consultant collected data from secondary sources including Smith Travel Research and ESRI.

B. HISTORIC MARKET CONTEXT

1. Competitive Lodging Market

According to Smith Travel Research, there are 57 hotels and motels reporting regular data within the Fort Lee Study Region. These lodging facilities total approximately 5,100 rooms. The Consultant analyzed these facilities to provide the most accurate representation of trends in the local market. It should be noted that the majority of these hotels and motels operate under nationally-recognized banners, such as Hampton Inn and Super 8. While these branded lodging facilities comprise the majority of overnight options in the study region, there other hotels and motels that do not have the support of a national brand. In addition, most of the sole-proprietor hotels and motels do not report data to STR.

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1 Smith Travel Research and ESRI are independent data vendors that provide market research and data tabulations of the lodging industry.
To better understand impacts that Fort Lee’s ALU facility has on local operators, the Consultant also analyzed the market performance of the hotels that have participated in the housing program designed for the Army Logistics University. There currently are 17 lodging facilities under LSP contract for fiscal year 2010. However, the fiscal year began in October of 2009. As a result, there is not sufficient data available for the current LSP facilities to quantify the impact of the Fort Lee housing program. As a result, the Consultant studied the historic trend patterns for the lodging facilities that have consistently participated in the MTSS/LSP programs in the past (Table 3-1). The twelve facilities reporting data account for approximately 1,200 rooms.

2. Market Segmentation

In 2005, Randall Travel released a report for the Crater Planning District Commission (PDC) studying the market segmentation in the greater Crater region. For the purposes of this effort, the Consultant modified the segments from this report to more closely reflect the scope and purpose of this analysis. Most notably, market segments related directly to Fort Lee business were separated from the remaining categories. The result is a more comprehensive review of the factors impacting demand within the region. The Consultant utilized seven demand sectors to analyze the Fort Lee Study Region. The seven demand sectors include:

- **Fort Lee – Lodging Success Program** – The LSP program, and its predecessor the MTSS program, are the vehicles used by the Army to contract with local hotels for off-post, temporary housing for trainees at the Army Logistics University. All stays associated with the LSP program are included in this segment.
- **Fort Lee – Official Business Travelers** – The Army conducts business with multiple private-sector contractors and federal and military officials each year. These individuals and groups may stay in the area on a short-term basis for meetings or longer if a job or task requires their presence until completion.

- **Fort Lee – Construction Demand** – Projects related to the growth of Fort Lee often require out-of-town construction personnel. The most recent example of this need is the development of the new ALU center. Out-of-town construction crews that are contracted with the Army and/or specializing in various skills sets not readily available in-town were needed to complete this project. The length of stay for these crews is solely dependent on the contracted task.

- **Business/Corporate Travelers** – The corporate presence in the Fort Lee Study Region is comparatively small to the larger centers along the I-95 corridor, but still provides a significant generator of hospitality demand for the region. The areas closest to Richmond draw visitors from both markets. According to the Randall Travel Marketing report prepared for the Crater District Planning Commission on tourism in the region, more than 50% of room stays in Chesterfield and Colonial Heights were business travel related.

- **Event-Related Travelers** – Many of the hotels and motels that responded to the Randall Travel survey indicated a large percentage of guests were with a special event. Within this group are SERF (Social Educational Religious Fraternal) travelers, which encompass demand from sports travelers. For example, NASCAR-sanctioned events at the Virginia Motor Speedway fall within the SERF market segment. It should be noted that the generally accepted acronym is SMERF, which includes Military. However, military stays were separated for this analysis.

- **Leisure/Tourism Traveler** - In addition, tourism travel accounts for a portion of total room stays in the region. Most notably, the Petersburg region has a rich Colonial and Civil-War-era history that draws a substantial number of tourists each year. According to the Randall report, tourism travel accounts for between 5% and 20% of business for hotels that responded to the survey.

- **Transient Demand** – These users are travelers driving through the region en route to a different destination. This group accounts for a small, but significant percentage of demand as the study region is the confluence of North-South Interstates 85 and 95. These two routes connect the major employment and population centers of the Northeast including Washington DC, Philadelphia, New York City and Boston to similar centers in the Southeast (i.e. - Charlotte, Atlanta, Orlando and Miami). The Gateway region also is traversed by an East-West connector (U.S. Highway 460) that ties the Interstates to the Hampton Roads region and the expanding Port of Virginia.

3. **Annual Occupancy Trends**

Hotels generally have outperformed motels since 2003 within the Fort Lee Study Region. The annual average for occupancy for hotels within the Fort Lee Study Region ranged from 61% in 2008 to 75% in 2007 (Figure 3-1). In contrast, the Study Region motels historically have maintained occupancy rates in the 50% to 60% range. Occupancy rates for regional hotels and motels have substantially declined since the start of 2008. Hotel occupancy has decreased from an annual high of 75% in 2007 to a sustained low around 62% in 2008 and 2009. Motel occupancy rates have decreased at a more severe pace, declining nearly 19% since 2007 to an annual average of 42% in 2009 (year-to-date).
LSP lodging facilities have experienced annual occupancy rates similar to those of local motels. Prior to 2008, the annual average occupancy rate ranged from 53.4% to 63.1%. However, occupancy levels in LSP facilities have increased slightly since 2007, and remain around 66%. It is likely that much of the drop in hotel and motel occupancy is a direct result of the national recession as businesses are reducing travel expenses. However, the consistency in occupancy displayed by the LSP facilities demonstrates the importance Fort Lee business, particularly the LSP program, has on area lodging.

It should be noted that sustained occupancy rates of 65% is generally sufficient to attract investors to construct additional hotel rooms in a given market. The strong performance of the local market has attracted investment, with several hotels opening since 2007 (detailed later in this Chapter). The unfortunate timing of these investments, and subsequent expansion of the local lodging supply, has exacerbated the impacts of the economic downturn. It was reported to the Consultant that the announcement of Fort Lee’s expansion and the corresponding increase in potential business also contributed to the interest in new hotel/motel development.

4. Market Occupancy Trends

In terms of seasonal occupancy, the Fort Lee Study Region can be defined as a three-season area. Occupancy rates for hotels and motels have traditionally been highest between March and October, dropping substantially from November through January (Figures 3-2 and 3-3). However, seasonal fluctuations in motel occupancy are not as severe as with hotel occupancy. For instance, motel occupancy has remained around 40% throughout 2009 except for in July and August when occupancy rose to approximately 47%. This difference most likely is due to the comparatively lower occupancy trends for motels. Simply put, smaller absolute fluctuations in occupancy for motels reflect similar

![Figure 3-1: LODGING OCCUPANCY RATES](source)

![Figure 3-2: MONTHLY OCCUPANCY RATES](source)

![Figure 3-3: MONTHLY OCCUPANCY RATES](source)

![Figure 3-4: MONTHLY OCCUPANCY RATES](source)
percentage changes as hotels. LSP hotels have recently experienced highest levels of occupancy during February and between May and August (Figure 3-4). These occupancy spikes coincide with historic attendance trends at the ALU facility, where Spring and Summer tend to have the greatest concentrations of student activity. Similar to the private market, the Winter season typically is the slowest at the ALU in terms of training loads.

Daily occupancy trends indicate regional hotels and LSP hotels have a more stable level of demand throughout the entire week, while motels peak during weekends. Regional hotels and LSP hotels historically have had high occupancy rates on Tuesday, Wednesday and Saturday nights, indicating a balanced mix between business travel and vacation travel (Figures 3-5 and 3-7). However, the long-term stays of ALU students, which may last between three and eleven weeks, provide a more evenly distributed level of daily occupancy. In contrast, motels generally have thrived on their Spring/Summer weekend traffic (Figure 3-6) often attributed to leisure travelers seeking the greatest affordability. These trends reflect national market tendencies, as weekday travelers (particularly business travelers) tend to patronize hotels more than motels.

5. Room Rates Trends

The average daily room rate charged by a hotel is another indicator of the quality of hotels. Hospitality venues that have a relatively high room rate within a given market often offer better in-room and hotel-wide amenities. Within the Fort Lee Study Region, regional hotels have maintained the highest average annual room rates, ranging between $69 and $85 per night between 2004 and 2009YTD (Figure 3-8). In contrast, the motel sector Lastly, average annual room rates for regional motels has maintained substantially lower room rates than hotels, with average annual room rates ranging from $43 to $49 per night during the study period (Figure 3-9). This finding is consistent with national market trends, as motel operators attempt to maintain lower operation costs to be more financially competitive for the value-seeking demand sectors.

In comparison, the LSP hotel market typically has posted more modest room rate levels, as compared to similar hotel operators in the Study Region. LSP hotels have posted lower average daily room rates between $5 and $15 below the hotel market average (Figure 3-10). The difference most likely reflects the impacts of the region per diem rates for the Region, currently at $70 per night. This figure is well below the posted rates for almost all hotels within the Study Region. Furthermore, LSP stays require participating hoteliers to provide an additional 8% discount below the market’s per diem rates as a requirement of participation in the program. The Consultant was able to confirm that all LSP
regions within the U.S. require some discount below the approved per diem rate; however the greater Petersburg region has the lowest per diem in the Commonwealth.

Average annual room rates for regional lodging facilities peaked in 2008 after steadily increasing since 2004. It is likely that declining occupancy rates between 2007 and 2008 in part prompted the drop in average room rates for 2009. It should be noted that the room rates shown for 2009 reflect the average through September. However, room rates in November and December are typically among the lowest of any month; therefore, room rates for 2009 are likely to end slightly lower than the reported year-to-date (YTD) rates. Declining occupancy and room rates in the Fort Lee region indicate that most lodging facilities are operating with lower revenue streams, which likely limits operating efficiency.

6. RevPAR Trends

Revenue per available room, or RevPAR, is one of the most important measurements in the hotel industry for measuring hotel efficiency. In contrast to average room rates, which reflect the average daily rate charged for occupied rooms, RevPAR is a measure of average revenues per available room-night throughout the entire year. For example, a 100-room hotel has 36,500 annual room-nights (100 rooms x 365 days per year). If this hotel has an occupancy rate of 50% (18,250 room-nights) and gross revenue of $1,825,000 for a given year, then its average annual room rate would be $100 and its average annual RevPAR would be $50 (annual gross revenue/total annual room nights).

While the average room rate only measures current market pricing, without regard to the effectiveness of that room rate, RevPAR measures the efficiency of renting hotel rooms during low occupancy periods. Therefore, hotels with high room rates may experience higher vacancy rates, resulting in lower RevPAR rates. While more aggressively priced competitors with higher occupancy rates will achieve a higher RevPAR and greater operating efficiency. For example, occupancy rates in lower-priced LSP hotels slightly surpassed that of regional hotels in 2008 and 2009 resulting in RevPAR rates becoming more comparable between the two lodging types.

Prior to 2008, operating efficiencies within the Fort Lee Study Region steadily increased. RevPAR increased each year between 2004 and 2008 for both local motels and hotels. This finding is significant when considering average room rate levels also increased steadily during this time period (Tables 3-8 and 3-9). Simply put, market demand was increasing without any commensurate increase in supply, allowing operators to increase room rates while not experiencing any net decline in occupancy. As mentioned, these conditions combined with the noted anticipation of the impact of the
expanded ALU created the opportunity for new hoteliers to enter the market. However, the economic downturn has adversely impacted both average room rate levels as well as RevPAR within the Study Region. While the average room rates for hotels and motels increased in 2008, the average RevPAR decreased more than 15% from 2007. Year-to-date 2009 market performance data indicates both average room rates and RevPAR levels have declined compared to the same period in 2008.

Despite the economic impacts of the changes in the national economy, LSP hotels have experienced a much less severe change in room rates and RevPAR (Figure 3-11). In 2008, LSP hotels maintained positive growth in RevPAR as a result of their comparatively stable occupancy levels. Although year-to-date 2009 data indicate these hotels have experienced some decline in room rate levels and RevPAR, the impact is much smaller than non-LSP hotels and motels. This is consistent with earlier findings, as the impact of the ALU and the LSP program has helped insulate LSP hotels from the decline in demand from the private sector.

C. DEVELOPMENT TRENDS AND PIPELINE PROJECTS

According to information provided by Petersburg Area Regional Tourism, the Fort Lee Study Region has experienced substantial growth in lodging supply over the past two years. Since the beginning of 2008, seven new hotels were delivered and two existing hotels built expansions. These nine facilities added 756 rooms (275,940 annual room-nights) to the Region's existing supply. A couple of hotels recently came online as construction of these facilities began earlier in 2009. These include the Residence Inn in Chesterfield County (136 rooms) and the extended-stay Value Place in Colonial Heights (124 rooms). As of the writing of this report, there are two additional hotels currently under construction that total 160 rooms (58,400 room-nights). Once completed, the Fort Lee Study Region hotel supply will have increased 23% since January 2008.

This level of growth is aggressive but consistent with the market fundamentals within the Study Region, including occupancy rates above 75%, increases in RevPAR for five straight years and limited new development. However, the change in economic climate has created a “double” effect, reducing demand concurrently with increased supply.

There are an additional 14 hotels in the development process. In total, these facilities represent 1,023 new hotel rooms, or an additional 20% above the current supply level. Much of the planned hotel development in the Fort Lee region is on hold or has yet to begin construction. This is likely due to a combination of the economic downturn, increased scrutiny and policy changes in the financial industry, and the proposed construction of a 1,000-room Temporary Living Quarters (TLQ) on post. The following points summarize the hospitality projects currently in the regional development pipeline. It should be noted that this information was collected by the Petersburg Area Regional Tourism Corporation.

- Three hotel projects are currently “in the development pipeline,” but development of these properties has been put on hold. Each of these projects are in Chesterfield County and are scheduled to operate under a national banner; Days Inn, Sleep Inn and La Quinta Inn respectively. Combined, the three hotels are planned to add 208 new rooms to the region. While all are planned to open in 2010, development schedules may change prior to opening.

- Most of the lodging projects that have gained approval, but have yet to break ground, are located in Hopewell, Prince George County and Chesterfield County. Conversely, there are no plans to develop new hotels in Petersburg and plans for one new hotel in Colonial Heights that is expected to be no larger than 150 rooms.
There are three potential hotel projects planned in Prince George County, which largely surrounds Fort Lee. One of these, Puddledock Place, is a 168-room facility that is projected to focus on extended stays for military personnel. The other two projects, which include a hotel near the intersection of South Crater Road and Clary Road and two hotels at Diamond Park near the intersection of Routes 460 and 106, were initially planned in 2004 and 1980, respectively. While it is unlikely these projects will be developed in the short-term due to changes in the economic climate, they are permitted and need to be included in future impact analyses.

There are seven hotel projects in the development pipeline in Hopewell and Chesterfield County. However, two of the four planned hotels in Chesterfield County, which together are projected to account for 156 rooms, are on hold as the market for lodging has slowed. Of the other two hotel projects, one is awaiting approval and is planned for 109 rooms, while the other planned 53-room project has been approved, but has yet to break ground. Lastly, the three hotels planned for Hopewell have been approved and are expected to account for an additional 211 rooms in the region.

If these facilities are constructed, the lodging market within the Fort Lee Study Region would likely experience a substantial negative impact. Local hoteliers indicated that market demand will not recover to 2007 levels for another 18 months to five years. The sudden infusion of additional supply above the growth experienced over the past two years would drive occupancy rates well below levels considered healthy for a market. While all indications these facilities will not be developed in the near-term, the analysis indicates the perceptions and realities within the local lodging market of the potential of continued economic growth and the impact of an expanded ALU has had a profound effect on the development community.

D. MARKET PROJECTIONS

The market projection analysis builds upon the existing conditions identified in the previous section of this chapter, to determine the potential impact the TLQ facility would have on the region’s lodging industry. The Consultant modeled the potential change in lodging demand for each of the various market segments impacting the Fort Lee Study Region. The projections were generated independently for each market segment, based on market conditions, the type of demand and the information available to the Consultant at the time of the analysis. The methodology is discussed in greater detail in the following subsection. The results of these efforts were measured based on the potential impact created by on-post housing, particularly the development of the new 1,000-unit TLQ.

1. Methodology

The projections were calculated for the seven primary demand sectors that comprise Fort Lee’s hospitality market. The methodologies for the seven demand sectors are detailed below.

- **Fort Lee – Lodging Success Program** – The Consultant was provided projected class loads for the Army Logistics University for fiscal years 2010, 2011 and 2012. These projections were provided by the ALU administration, the Quartermaster Corps and the U.S. Air Force (confirmed numbers were not available from the Ordnance Corps or the Transportation Corps). These projections include class schedules, anticipated student loads and average length of each class. It was reported that projections beyond FY2012 are not available. The Consultant projected a stable activity level beyond FY2012. The Consultant utilized the official projections in the model.
- **Fort Lee – Official Business Travelers** – The Consultant projected future official business travel based on the increase in permanent party activity at Fort Lee. A baseline estimate was created utilizing current estimates for Fort Lee Official Business travel and permanent party personnel levels. The Consultant then applied this ratio to projected future permanent personnel levels provided by the Fort Lee BRAC coordination office. As such, the increase in permanent personnel is projected to result in an increase in Fort Lee Official Business.

- **Fort Lee – Construction Demand** – The Consultant calculated estimates of construction jobs based on current and projected expenditures related to the BRAC action. These estimates reflect regional industry averages, as calculated by the Bureau of Economic Analysis’ (BEA) Regional Input-Output Modeling System (RIMS II). The construction job levels reflect changes in construction activity based on the start and end-date projections provided by the Fort Lee BRAC Coordination Office. The Consultant apportioned a small percentage of these jobs to workers from outside the region to reflect the need for specialists and project managers for out-of-area contractors not readily available locally.

Due to the BRAC action deadline, all construction related to the increased function of Fort Lee are scheduled to be completed by the end of FY2013. As such, all construction stays are projected to end at that time.

- **Non-Fort Lee Market Segments** – The Consultant projected demand for each of the four non-Fort Lee market segments based on historic market trends, independent market research and interviews with various hotel operators within the Fort Lee region. This effort resulted in a two-tiered market growth projection model to account for continued effects of the current economic downturn. The growth rates for the business/corporate travel, event-related travel, leisure/tourism travel and transient demand each reflect slow economic recovery through 2013 and then individual recovery growth rates through the end of the study period. The assumptions used for this effort were reviewed and supported by a sampling of local hotel operators during a collaboration meeting.

2. **Annual Hotel Demand**

As noted earlier in this chapter, total market demand has declined between 2007 and 2009. Total private-sector market demand is estimated to be 1,102,500 room-nights per year, approximately a 10% decline from 2007 levels. In addition to the decline in occupancy detailed earlier, market segmentation has changed slightly within the Study Region due to growth of Fort Lee activities. As a result, Fort Lee-related business accounts for almost 40% of all 2009 lodging demand within the Study Region (Figure 3-11). Non-LSP demand (19.9%) is slightly higher than private-sector LSP demand (17.3%). Business/corporate travel (not related to Fort Lee) accounts for an additional 30.5%, with the remaining non-Fort Lee sectors totaling slightly less than 30%.

![Figure 3-11](source: RKG Associates, Inc. 2010)
Market demand is projected to increase substantially by the end of fiscal year 2011, primarily due to the ALU reaching full operation. The projection data provided by the ALU, Air Force and Quartermaster Corps indicate the average daily load (ADL) of students will increase from 1,036 students for FY2009 to approximately 2,350 students in FY 2011 (this total does not include the Ordnance Corps or Transportation Corps). The fully operational ALU would result in an additional 480,000 room-nights of demand. The increased permanent-party personnel at Fort Lee likely will bring additional official business travel to the region by FY2011 as well. Permanent-party personnel levels are projected to increase by nearly 14% between FY2009 and FY2011. As such, official business activity is projected to increase proportionally.

In terms of non-Fort Lee business, market research and anecdotal information indicate the non-Fort Lee business demand will begin a slow recovery period in 2010. The Consultant projects these segments (business/corporate, event related, tourism and transient stays) will experience modest growth during the study period, returning to pre-recession levels at around 2013. In total, the Consultant projects the total private market demand to reach almost 1,558,000 room-nights for FY 2011 (Figure 3-12).

Since completion of the TLQ is not proposed to occur until mid-FY2012, all of the new LSP demand would need to be housed in the private market. As a result, the private market LSP segment is projected to account for more than 40% of all business in the Study Region in FY 2011 (Figure 3-12). Despite the comparatively smaller market share, the Fort Lee official business and each of the non-Fort Lee market segments are projected to experience modest increases in demand by FY2011. Only the Fort Lee construction stays segment is projected to experience a decline in private market stays by FY2011. This is due to the slowdown in construction activity, as most BRAC-related projects are projected to be complete by the end of FY2011.

After FY2011, lodging demand is projected to reach a relative equilibrium. Growth in Fort Lee related private market stays are projected to flatten out, as the ALU operations and the permanent personnel levels are expected to reach full capacity by FY2012. Furthermore, BRAC-related construction is proposed to end by the close of FY2013. As such, demand for lodging by construction workers related to Fort Lee will end at that time. While it is likely there will be fluctuations in the total number of room-nights demanded in a given year, the Consultant’s research indicates that there are no substantial changes or adjustments planned for Fort Lee beyond 2012. As a result, there is no market-based rationale to project major changes in demand for short-term lodging. In contrast, the non-Fort Lee related business is projected to continue to grow beyond FY2012. These growth rates range from 1.0% to 2.0% annually for the four market segments. This comparatively low growth rate reflects historic market trends, and is consistent with anecdotal information shared by a sampling of local hotel operators. It is important to note any substantial changes in market conditions or Fort Lee operations beyond normal market operating conditions could alter these numbers.
The most substantial difference in private-market demand is the development of the TLQ facility. The 1,000-unit short-term lodging facility has a 365,000 room-night capacity. The opening of the TLQ in the middle of FY2012 will have a direct impact on the private market demand levels. The FMWRC has a stated mission of maintaining occupancy in on-post facilities. As a result, approximately 75% of the incremental growth in LSP stays will be captured by the on-post facility during its first full year of operation. By FY2017, the total room demand will be slightly below 1,247,000 million room-nights for the Fort Lee Study Region, with the market segmentation levels more closely resembling FY2009 shares than FY2011 (Figure 3-13).

While this total reflects a decline in total demand from FY2011, it represents a net increase from current year (2009) demand levels. As such, the development of the Temporary Living Quarters will remove some of the windfall growth experienced in the private market, but the Fort Lee region’s hotel market will still experience a net increase in demand once the ALU is fully operational and the TLQ facility is opened.

It is important to note that the "break-even" level for the private market to maintain its current demand levels from the LSP program after the TLQ facility is operational is estimated at 2,100 average daily load. Any operational loads above this number will result in a net increase. Anything below this level will draw existing business out of the market. While current projections from the Logistics University surpass this threshold (currently 2,450 ADL without the Ordnance or Transportation Corps), it is widely recognized that these projections reflect the Army’s best estimate on future needs based on current conditions. If the Army’s needs change between now and when the TLQ facility goes online, the actual ADL from Fort Lee could change as well (either positively or negatively). Given the FY2009 ADL for Fort Lee was 1,036 students, any changes in training needs could have substantial impacts on the net benefit/reduction for the local private sector lodging industry.

Furthermore, current LSP hotelier participants have expressed concern that they have not received the level of market activity during the first few months of FY2010 similar to FY2009 levels. Several factors have been identified that could be contributing to this discrepancy, including the change in LSP procedure and the current operational difficulties surrounding the Central Reservation Center (CRC). However, the Consultant confirmed that the ALU has been operating at projected levels for the first quarter of 2010. Data provided by the ALU administration indicate approximately 2,400 soldiers have attended during the first quarter of FY2010. This represents an increase of approximately 20% from FY2009. In addition, detailed projection data indicate the ALU has achieved a 98% attendance rate for classes scheduled over the past three months. While there was one cancelled class and five postponed classes, the data indicate the ALU is operating at its projected capacity. As such, the discrepancy between realized room nights at the hotels and attendance levels at Fort Lee is not related to reduced operations. It is the Consultant’s finding that this disparity is reflective of problems
in implementing the new policies and procedures related to the LSP program (detailed in the next chapter).

3. Supply

As mentioned earlier in this chapter, the Fort Lee Study Region has experienced substantial growth in lodging supply over the past two years. Since the beginning of 2008, seven new hotels were delivered and two existing hotels built expansions totaling 756 rooms (275,940 room-nights), or approximately a 13.8% increase in the existing supply. In addition, there are two additional hotels currently under construction that total 160 rooms (58,400 room-nights). Once completed, the Fort Lee Study Region hotel supply will have increased 23% since January 2008.

If the additional 14 hotels totaling 1,023 rooms that have been proposed within the market are completed, these facilities would reflect a net increase of 43% in market supply since January 2008 when combined with the facilities completed since 2007. As of the writing of this report, all 14 facilities are "on hold" for various reasons including site plan review, loss of financing or market impact. However, these potential facilities pose a second substantial increase to the regional market. It was reported to the Consultant that this unprecedented development interest resulted from a range of factors. The particularly strong occupancy rates prior to 2008 and the announcement of the expansion of ALU activities on Fort Lee were cited most often as the genesis of this expansion.

4. Findings

The strong growth in market supply combined with the adverse impacts from the economic downturn substantially impacted the Fort Lee Study Region market occupancy rates. Occupancy levels declined from 66.9% in 2008 to 58.8% in 2009 (Figure 3-14). However, the increase in activity at the ALU and with additional Official Business stays are projected to have substantial impacts by FY2011, when private sector occupancy could be as high as 81.2% market-wide. The completion of the TLQ facility
will reduce the private-sector demand starting in FY2012, with market-wide occupancy projected to be 62.5% in FY2013, the first full year of operation. Beyond FY2013, occupancy is projected to increase slowly as a result of growth of the non-Fort Lee markets.

It is important to note that the development of the 11 proposed hotels would have an adverse impact on occupancy as well. The development of these proposed hotels, with the first to be delivered in FY2011, will bring occupancy levels below 51% in FY2013. Occupancy is not projected to rise above 53% by the end of the study period (FY2017). This finding is consistent with earlier analysis, as a 43% increase in total supply within five years is unsustainable in most any market.

E. IMPLICATIONS

The Fort Lee Study Region lodging market historically has performed very well. Prior to 2008, market demand increased steadily bringing occupancy rates above 70% for the market as a whole. Much of this success is related to activity at Fort Lee. Hoteliers report that Fort Lee has accounted for as much as 40% to 50% of all business within the Study Region. However, the economic downturn has resulted in a net decline in market demand each year since 2007. Concurrently, the development of more than seven new hotels and a total of 756 rooms has exacerbated the decline in occupancy levels. The Consultant estimates that the 2009 occupancy rate is 58.8%, or approximately 8% below 2008 levels.

The expansion of class load at the ALU will have a substantial impact on the regional market, both short-term and long-term. The projected activity level for FY2011 will result in an additional 480,000 room-nights of demand for the private sector, a 40% increase in one year. The Consultant projects regional occupancy level of more than 81% during this period. Even with the operation of the TLQ facility, the net benefit to the private sector will assist in negating the impacts of the economic downturn. The most impending threat to the viability of the private sector is over speculation. IF the additional 11 hotels are developed as proposed within the timeframe stated, the market will not be able to support all facilities. Simply put, the downward pressure on occupancy will create a pricing competition that will drive some facilities to failure.

However, there has been concern expressed about the viability of the ALU to deliver the amount of demand projected by the Army. Given the uncertain times our nation is still facing locally and globally, substantial changes in training needs could impact the Fort Lee Study Region lodging market. Furthermore, the Consultant was unable to obtain certain data from the Army by the writing of this report that potentially could address some of these issues. Most notably, concerns were raised about the status of the FY2010 J-3 class load listing and why LSP hotels are not receiving levels of demand commensurate with their contracted room-night amounts or even activity similar to the previous fiscal year. While some assumptions have been made to explain this discrepancy in the next chapter, the concern about future needs and the ability of the Army to meet the 2,100 average daily load threshold to avoid adverse impacts to the private market remain a legitimate concern.
4 LODGING SUCCESS PROGRAM ANALYSIS

A. INTRODUCTION

The following chapter details the changes within the local off-post Fort Lee-generated hotel demand resulting from the Lodging Success Program (LSP) and the proposed 1,000 room Temporary Living Quarters (TLQ) facility planned for Fort Lee. The Consultant analyzed the expected absorption of this demand by the Fort Lee Study Region’s hotels and motels, and the methodology by which this demand was apportioned. Existing lodging supply is represented by the local hotel market, divided into three distinct tiers, as well as on-post lodging facilities, including the proposed TLQ facility projected to be delivered in February 2012. The methodology and gravity model used to distribute the projected demand is laid out in detail, as well as the results and implications of the analysis.

B. HOTEL TIER DELINIATION

Working from the Fort Lee Study Region, defined in the previous chapter as the nine-mile radius surrounding Fort Lee, the Consultant further divided the market into three tiers. The delineation primarily is based on distance from Fort Lee. In order to determine how best to aggregate the Study Region’s various hotels and motels, the Consultant performed a geospatial analysis to assess the location and concentration of hotels around Fort Lee. Upon doing so, three groupings of lodging facilities were apparent around Fort Lee. The first group was found to be clustered immediately around the Fort within a one mile radius of the post. Due to their convenience and proximity to post, these facilities are ideally located for serving the needs of the military. These hotels and motels represent Tier I. Tier II includes hotels and motels in downtown Petersburg, along South Crater Road, and near Southpark Mall, all of which provide convenient lodging to those requiring immediate access to the Southside Regional Medical Center and the concentration of businesses found around the Mall. These hotels are clustered within one to five miles of the Fort. Tier III is mostly composed of the hotels clustered around Interstate 95’s Exit 61 in Chester, but also includes a few hotels scattered to the south and west as well. These lodging facilities are located within five to nine miles of the Fort. A gap in hotels and motels occurs in areas past the nine mile radius, after which the next closest hotels are much better positioned to serve the south suburban Richmond or Richmond International Airport market than to serve the Fort Lee Study Region and are therefore excluded from it.

Given these findings, the Consultant subdivided the Study Region into three tiers, separated at one, five, and nine miles from Fort Lee (Map 4-1). Of the 5,099 rooms and 57 hotels and motels in the Study Region, almost 30% of the facilities and almost 36% of the rooms are LSP (Table 4-1). Tier I

<table>
<thead>
<tr>
<th>Tier</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>Total</th>
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<tr>
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<td>32</td>
<td>13</td>
<td>57</td>
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<tr>
<td>LSP</td>
<td>5</td>
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<td>17</td>
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<tr>
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<table>
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<th>Number of Hotel Rooms</th>
<th>Tier</th>
<th>I</th>
<th>II</th>
<th>III</th>
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<td>5.8%</td>
<td>35.7%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Smith Travel Research & RKG Associates, Inc., 2009
holds the highest concentration, with almost half of its hotel rooms composed of Lodging Success Program (LSP) rooms. Conversely, Tier III holds the lowest concentration of hotels and rooms, with almost 8% and 6%, respectively.

C. METHODOLOGY

RKG Associates created a gravity model in order to approximate the velocity ("when") and apportionment ("where") of Fort Lee-related stays absorbed in the Fort Lee Study Region. Gravity models are used in the social sciences to project human behavior in a similar manner to Newton's Law of Gravity. For the purposes of this analysis, each hotel or motel was given a certain "weight" which was calculated to include characteristics such as price, distance to Fort Lee, and class (all of which will be described later). This resulting weight is proportional to a hotel's ability to attract stays, meaning that those hotels with the greatest weight have the best chance of attracting hotel demand, just as in Newton's Law of Gravity, in which objects with relatively larger mass have a greater attractive power than objects with smaller mass.

It should be noted that limitations of the model and its input data do exist. First, since human behavior does not always act as orderly as inanimate matter, the gravity model cannot account for exceptional behavior or decision-making by an individual who might have a specific preference for a certain hotel or a corporate account with a specific chain which will encourage him or her to act out of accordance with the gravity model. These exceptions are bound to occur, and no claim is made by the Consultant
to be able to account for them. However, it is expected that the gravity model produces a reasonable representation of reality sufficient for this analysis. In addition, the Consultant sought to validate both the model and the input data through interviews with local hotel operators, government officials, Fort Lee personnel, and Department of the Army staff.

Second, the student loads provided for the coming years are projections based on the dynamic needs of the United States military. As such, shifts in the military’s staffing requirements may impact actual student loads. However, the numbers utilized herein were the most current figures available at the time of writing. Third, there are some ancillary sources of demand for which the Consultant could not accurately account. For example, visitor counts to the Defense Contract Management Agency (DCMA) were still being calculated and verified at the time of writing, and could not be included in the analysis. However, cases such as DCMA’s visitors are expected to represent a relatively small portion of the total demand, the inclusion or exclusion of which will not significantly sway the final results.

1. **Input Assumptions**

Various military entities at Fort Lee provided documentation of their events and training activities requiring overnight stays. This information included the number of trainees, the length of their stays, and the timing of those stays. These stays are divided into three major categories based on the nature of the visit. These three categories are as follows:

- **Lodging Success Program (LSP) Stays** – These stays include those that are directly related to the Army Logistics University (ALU) and include students who have been ordered to Fort Lee for as little as a few days to as much as thirteen weeks to be trained in a wide range of skills. The soldiers in this pool might be trained at the Army Logistics University (ALU), Quartermaster School, Transportation School, Ordnance School, Military Occupational Specialty Training Course (MOS-T), or the Air Force’s Culinary or Transportation Management Schools. Many of these programs are already in place, and all of them are projected to be fully operational by the beginning of FY2011. If the soldier’s accommodations were made through the Family and Morale, Welfare and Recreation Command (FMWRC) Central Reservation Center (CRC), these soldiers will pay the per diem rate ($70) less a mandated 8% discount. In addition, the hotelier will be required to return a $2 per room night cost sharing fee to FMWRC. If the soldier has made his own reservations, the model assumes the same rate and discount, less the $2 cost sharing fee.

The data for these stays was provided by the Army Logistics University, the Quartermaster School, and the FMWRC during fall 2009. In addition, the Army Logistics University is still confirming its projected student loads for the Transportation and Ordnance School student loads to be instructed at Fort Lee, therefore, at this time the model does not reflect the stays generated by these schools. Anecdotal information indicate the Transportation and Ordnance Corps will add as much as 120 average daily load to the market.

The Consultant is also awaiting additional data on student stays that have already occurred, in order to determine the ratio of scheduled students to fulfilled LSP reservations. On December 7, 2009, a Freedom of Information Act (FOIA) request for this data was made to FMWRC through Virginia’s Congressman J. Randy Forbes of the 4th District to the U.S. Congress. FMWRC confirmed receipt of the request on December 10, 2009, but indicated that more time was needed to gather the data. In the mean time, the Consultant has proceeded in its analysis with estimated figures to substitute for the actual data until it can be delivered.

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1 Data was provided to the Consultant through frequent phone and email contact with Chief Scott Brown at Fort Lee’s BRAC Synchronization Office, which provided a single point of contact to the military in gathering the necessary information. Correspondence included several phone calls.
Per Diem Stays — These stays also include visitors who are contractually obligated to visit Fort Lee, but are not being trained at the ALU. These visits are often referred to as temporary duty stays, or TDY stays. Primarily, this grouping includes defense contractors and military personnel travelling on official military business. Visitors to the Defense Contract Management Agency’s (DCMA) Learning Campus (expected to be operating at full capacity by FY2012) are included in this category. The per diem stay category also includes all permanent party stays. Permanent party stays include newly assigned permanent personnel at Fort Lee. These new arrivals are housed off-post for as long as ten days during which time they can search for housing.

Fort Lee-Related Private Stays — These stays include visitors who do not qualify for official visit status and will therefore pay the hotel’s market rate as private citizens. Some of the specific events that would be included in this category are an annual golf tournament, a military ball, the Best Warrior Competition, or attendees of a graduation from a training course at Fort Lee. It also includes the hotel stays generated by construction contractors providing their services to Fort Lee’s capital improvements program, which is expected to run through FY2013. Annual attendance numbers for these events were provided by Fort Lee’s BRAC Synchronization Office, while construction figures were calculated by RKG Associates using scheduling plans provided by FMWRC.

The resulting stays for these three categories were then projected from 2009 to 2015 in order to fully illustrate hotel market conditions before and after the delivery of the TLQ. These figures represent the demands generated by the Fort, and were used to apportion projected hotel stays to the Study Region’s lodging facilities, as outlined in the following section.

2. Allocation and Ranking Process

The Consultant created a series of weights for each source of demand (LSP, per diem, and private stays) in order to address the preferences and priorities of each type of hotel stay. These weights were then applied to each of the Study Region’s hotels, providing a score by which each lodging facility could be ranked. For example, soldiers officially assigned to temporary duty (TDY) on-post are much less sensitive to the price of a hotel room, since they are eligible to pay the per diem rate, for which they are reimbursed (the current per diem lodging rate is $70 per night). Therefore, if a soldier books a room at a $110 per night hotel, he will only be required to pay the per diem rate of $70. The ability of a soldier to use per diem rate is expected to influence him to choose the best quality hotel at which he can find an available room, while taking into account distance from Fort Lee. In a contrasting example, a plumbing contractor performing his services on Fort Lee is expected to stay at the least expensive lodging facility he can find, since he is not eligible for the per diem rate and may not be reimbursed for his stay at all. Distance will still act as a factor, but the private visitor is expected to be more price sensitive than those on military assignment. The model is a representation of these sorts of decision-making instances occurring during the study period (2009-2015).

The four weighting factors include distance from Fort Lee, class, price, and capacity for hotel stays. Each hotel receives a score for these four factors, and the total of these scores provides the figure by which the hotel is ranked. The four factors are described in detail as follows:

- **Distance from Fort Lee** — The distance from the boundary of Fort Lee to each hotel was measured using a geographic information system (GIS). The closer the hotel’s location to the Fort, the higher the rank assigned to the hotel. This is the case for LSP, per diem, and private stays, since it is expected that all stays would prefer to lodge as close to the Fort as possible.

2 Data provided via email from Pam Sutton, Deputy BRAC Program Manager at the Defense Contract Management Agency at Fort Lee on October 20, 2009.

3 Data provided via email from Chief Scott Brown, BRAC Synchronization Office at Fort Lee on November 2, 2009.
Hotel Classification – Using Smith Travel Research’s six hotel classifications, each hotel received a rank according to its class, with a higher class associated with a higher rank for LSP, per diem, and private stays (Table 4-2). Hotel class is largely defined by the physical characteristics of the facility and the level of service provided to guests. Luxury class hotels typically offer the highest level of service to their patrons with extravagant features and detail in the rooms and common areas. These hotels typically cost more than the average accommodation and would likely include a wide array of in-house services and features, possibly including a spa, and a gourmet restaurant. Upper upscale hotels will likely have concierge service and extended room service hours. Upscale class hotels might have a well-kept lounge, laundry valet, and flat panel televisions in the guest rooms. Midscale hotels with food and beverage (F&B) services might offer meeting and banquet services, a swimming pool, fitness facilities, and a restaurant. Midscale hotels without food and beverage services may offer a complimentary shuttle, wireless internet, and adequate room furnishings. Economy hotels might have a coin operated laundry and free local calls.

Table 4-2
Hotel Class Descriptions
Fort Lee, Virginia

<table>
<thead>
<tr>
<th>Hotel Class</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxury Class</td>
<td>Ritz-Carlton, Four Seasons, Hilton</td>
</tr>
<tr>
<td>Upper Upscale Class</td>
<td>Marriott, Sheraton, Embassy Suites</td>
</tr>
<tr>
<td>Upscale Class</td>
<td>Crowne Plaza, Courtyard Marriott, Residence Inn</td>
</tr>
<tr>
<td>Midscale w/ F&amp;B Class</td>
<td>Clarion, Ramada, Holiday Inn</td>
</tr>
<tr>
<td>Midscale w/o F&amp;B Class</td>
<td>Hampton Inn, Country Inn &amp; Suites, Comfort Inn</td>
</tr>
<tr>
<td>Economy Class</td>
<td>Econo Lodge, Motel 6, Red Roof Inn</td>
</tr>
</tbody>
</table>

Source: Smith Travel Research & RKG Associates, Inc., 2009

Price – The Consultant assumes that the Fort Lee hotel market is “efficient”, which, in economic terms, means that price is a reliable indicator of quality, with higher prices correlating with higher quality. However, as explained previously, soldiers temporarily assigned to Fort Lee are not price sensitive, since they pay the per diem rate and are reimbursed for their hotel expenses. Conversely, private visitors are not eligible for per diem stays and may not be reimbursed for their hotel expenses. Therefore, they are expected to be more price sensitive. Given these two different paradigms, price is ranked differently for assigned soldiers and private stays. In the case of soldiers assigned to Fort Lee, a higher hotel price indicates a higher hotel rank, whereas a higher hotel price indicates a lower hotel rank for the private stays.

Quality - In the case of LSP and per diem stays, the two factors of class and price are integrated into a single “quality” indicator to form a single score. This operation is not executed for private stays since the price and class are not both considered to be positive indicators of demand. It is expected that LSP and per diem stays will be inclined to find the “best” (assuming price and quality are accurate indicators of quality) hotel possible, while private visitors will prefer to find the lowest price, all other things being equal.

Capacity – The final component considered in ranking the hotels is the hotel’s capacity for military (in the case of LSP or per diem stays) or private stays. These figures were gathered from the Randall Travel marketing report created for the Crater District Planning Commission and interviews with local hoteliers, both of which provided business mix data for many of the hotels. By applying the percentage of historical military or non-military stays from the reported business mix, a capacity for each hotel was delivered. The larger the hotel’s capacity for military stays (for LSP or per diem stays) or private stays, the higher the hotel’s rank.
D. DEMAND CAPTURE RESULTS

In order to model the absorption of Fort Lee-generated hotel demand, the Consultant assembled a model that ranked the hotels by the above characteristics to apportion the demand throughout the Study Region. The model’s logic is constructed to distribute all the demand that remains after on-post lodging has been filled to capacity. This remaining demand is first apportioned to the highest-ranked hotel, which would capture its share of the market demand. Once the highest-ranked hotel met this level, this process would continue down the list of ranked hotels until no additional demand remained to be served, at which point any hotel not having a sufficiently high rank would not be expected to absorb any demand related to Fort Lee operations.

As discussed earlier, the model has limitations on predicting hotel-by-hotel performance as a result of nature of individual decision-making priorities. The Consultant acknowledges that the “highest ranked” hotel likely will not capture all demand until it reached capacity before any other hotel receives any. However, the scope of this project was to identify the potential impact of the TLQ facility on the market, not individual hotels. As such, the results of the model generally reflect historic and current market conditions on an aggregate basis within the Fort Lee Study Region. To this end, the ranking system and demand apportionment applied for this analysis is an adequate representation of market absorption activity.

To illustrate the findings of the model, the Consultant graphed the results of two key performance indicators for the overall Study Region as well as the three Tiers: potential demand capture and potential occupancy rate. Potential demand capture is the number of room nights that would be captured by each Tier as calculated by the gravity model. Potential occupancy rate is the quotient of the potential demand capture divided by the total available room nights for Fort Lee related stays within a given Tier. The former figure depicts the quantity captured by each Tier, while the latter illustrates how much of a Tier’s capacity would be filled by the captured room nights. It should be noted that with the exception of the following section, the two indicators are calculated for only one specific source of demand (LSP, per diem, or private) at once. Therefore, an occupancy rate of 3% for private stays does not indicate that the tier will only have a 3% occupancy rate overall, but simply that approximately 3% of total rooms available for private stays will be occupied by Fort Lee related business.

1. All Fort Lee-Generated Stays

In order to provide an overall sense of the projected demand for room nights during 2009-2015, the potential demand capture for all demand types is provided (Figure 4-1). This analysis depicts the impact of the planned increase in temporary and permanent party troops, construction activity, and the delivery of the TLQ on the demand for Fort Lee-generated lodging. The most significant finding is that the increase in ALU activity by the beginning of FY2011 will provide a substantial amount of business for the hotel market prior to the completion of the TLQ facility. Overall demand for off-post lodging spikes by nearly 480,000 room nights from FY2009 to FY2011. The development of the TLQ facility brings 365,000 room nights of this demand back on-post, effectively limiting the long-term potential gain for the lodging industry.

Tier II facilities stand to experience the greatest fluctuations based on market projections. The results indicate that Tier I’s absorption will remain relatively stable at about 225,000 room nights annually. This stability will likely be the result of the Tier’s relative attractiveness to all Fort Lee market segments, allowing non-LSP demand to supplement changes in private sector activity for ALU students outside Fort Lee. In contrast, Tier II is projected to experience growth from an annual absorption of about 200,000 room nights in 2009 (47% of the market) to about 300,000 in 2015 (57% of the market). In addition, Tier II’s potential capture peaks in 2011, with a total expected capture of about 500,000 room nights, almost 65% of the total market share. The wider fluctuations occurring in Tier II is the
result of Tier I’s inability to absorb further demand as it reaches capacity, effectively creating a highly competitive market amongst these hotels.

Tier III is projected to capture a comparatively small level of demand, reflective of its competitive disadvantage being the furthest from Fort Lee. Substantial changes in demand capture in this Tier generally is a result of exceptional short-term demand levels corresponding to the peak period of new temporary and permanent soldiers before the delivery of the TLQ. The most significant finding of the overall analysis is that the Study Region will experience a net gain in hotel room demand between 2009 and 2015, despite the delivery of the TLQ in 2012. The total number of projected room nights for 2015 is more than 30% higher (about 125,000 room nights) than the total room nights estimated to be captured for 2009.

However, it is important to note that this net benefit is based on the projection data provided by the ALU administration. As noted in the previous chapter, the “break even” point for private lodging facilities to maintain current LSP business levels is 2,100 average daily load (ADL) after the TLQ facility is built, more than double what FY2009 ADL levels. If training needs shift substantially away from logistics-based positions, the new TLQ facility potentially could draw existing private-sector LSP business out of the market. While there is no indication these needs may not be met, the uncertainty of global security issues creates a level of risk for the local lodging industry.

The market projections indicate that the Study Region will experience a net increase in LSP-related occupancy rates, despite the operation of the TLQ (Figure 4-2). This will occur most markedly in Tier II, where potential occupancy is expected to jump from less than 20% of available supply in 2009 to just below 30% in 2015, with a peak...
of about 45% in 2011. Tier III’s overall potential occupancy capture from Fort Lee-generated stays will also rise, increasing from about 2.6% in 2009 to about 4% in 2015. Tier I will rise from just under 60% to slightly more than 60% during 2009-2015, including a peak of about 65% in 2011.

2. **LSP Hotel Stays**

The model’s results for LSP stays indicate that Tier I hotels (those within one mile of Fort Lee) are expected to capture a relatively stable number of room nights (about 150,000 annually) between 2009 and 2015 (Figure 4-3). Like the figures for Tier I in the previous section, these hotels closest to the Fort already enjoy the advantage of close proximity to the Fort, and are expected to continue to absorb a disproportionate amount of LSP-related business. However, Tier I does experience a temporary swell of LSP business in FY2011, as the ALU facility is in full operation and the TLQ facility is not complete. The analysis reveals that this swell will exceed the capacity dedicated to LSP stays of these hotels (Figure 4-4), forcing other business types out of these facilities to allow for the LSP demand.

As a result, LSP-related business will be forced into Tier II and Tier III hotels, both LSP-qualified and non-LSP qualified facilities. Simply put, the existing 17 hotels do not have the capacity to handle the FY2011 demand at 100% occupancy and no other business segment activity. Tier II hotels are estimated to have captured fewer than 100,000 room-night of LSP demand in FY2009. In contrast, they are projected to capture more than 500,000 room nights in FY2011. Similarly, Tier II facilities are estimated to capture some LSP demand in FY2011, despite capturing very little in FY2009.

The result of this analysis is similar when comparing actual capture to available supply. Approximately 17% of the supply available to LSP stays in FY2009 within Tier II was occupied. The share of supply to actual capture increases to more than 95% in FY2011, prior to the TLQ facility coming online. Simply put, the ramp
up in ALU operations without the TLQ facility creates a substantial change in occupancy and market capture within the Fort Lee Study Region. This impact influences per diem stays as well.

3. Per Diem Hotel Stays

The results of the per diem portion of the analysis yielded a similar trend to the LSP portion, but without the post-peak decline. The stable to modest growing nature of the per diem stays reflects the gradual increase of non-ALU training activity and the general stability in net permanent troops levels at Fort Lee. Projections indicate strong and stable absorption in Tier I, increasing absorption in Tier II, and minimal absorption in Tier III (Figure 4-5). Tier I is projected to take up about 30% of the per diem demand annually, or about 60,000-70,000 room nights. Tier II will also consistently consume about 62% of total demand, but will grow in real numbers from about 130,000 to 160,000 room nights annually. Tier III is expected to experience a growth in room nights captured (from about 11,000 to 17,000 between 2009 and 2015) while maintaining a 5-6% share of the total demand.

It should be noted that the number of per diem stays within Tiers I and II actually decline in FY2011 as a result of the market pressure from LSP stays. As a result, this demand is shifted out into Tier III, where the net demand capture increases from 30,000 room nights in FY2009 to more than 78,000 in FY2011. The occupancy capture levels for Tier I and II actually decline in FY2011 due to the impact of the new LSP stays. In contrast, the Tier III hotels effectively capture this spillover and experience short-term boost in per diem business until the TLQ facility is completed.

The LSP demand also is projected to have long-term impacts on the distribution of per diem demand. The post-TLQ projection data indicate that per diem stay occupancy levels for Tier I and Tier II will remain below current estimate levels in the market. This is most likely due the net
increase in LSP stays, and the need for LSP facilities to accommodate this demand. Conversely, Tier III hotels are projected to experience a net increase in per diem business, on an occupancy basis.

4. Private Hotel Stays

Private stays directly relate to Fort Lee operations are projected to be exclusively captured by Tier I and Tier II facilities. This is due to the comparatively small quantity of private demand relative to the amount of available room nights in the local market. Simply put, Tier I and Tier II have a good mix of hotel types and price ranges for Fort Lee visitors. As a result, all of the demand for private stays is projected to be absorbed before any spill over into Tier III can occur.

Private sector demand is predominantly construction-related stays tied to the approximately $1.4 billion in capital construction projects tied to the 2005 BRAC action for Fort Lee. During the capital improvement process, construction contractors are expected to generate several thousand room nights of hotel demand as a result of the influx of temporary work crews and the need for specialists not readily available within the region. However, most of the private stay demand is projected to end prior to the conclusion of the study period. Federal mandates require all construction activity from this BRAC round to be completed by FY2013. As such, these temporary construction jobs will no longer be required, and transient workers will seek jobs elsewhere. The completion of the construction activity likely will cause a noticeable drop in overall private stays, since little growth is expected to be borne by other Fort Lee-generated sources. The number of private stays captured by Tier I is expected to drop from about 9,000 in 2009 to about 1,500 by 2015 (Figure 4-7). During this time, however, Tier I’s share of private stays will increase from less than 30% to almost 50%. Tier II’s amount of capture should also decline, decreasing from about 20,000 annually in 2009 to about 2,000 annually in 2015. As mentioned previously, Tier III is not expected to capture any Fort Lee-generated private hotel stays.

Potential occupancy rates for private stays follow the trend established by the potential demand capture (Figure 4-8). Occupancy for Tiers I and II decline from about 2.5-3.0% in 2009 to less than 0.5% by 2015. These low occupancy levels are a result of the relatively small amount of private stays generated by Fort Lee. The events included in this category of stays (golf tournaments, military balls, and other annual events) are quite small in nature and therefore will not represent a significant portion of demand in the coming years.

*Construction estimates provided by the Crater Planning District Commission.*
E. IMPLICATIONS

The analysis indicates that the development of the Temporary Living Quarters will not adversely impact the private lodging market when compared to current conditions. The projected increase in Fort Lee related stays is greater than the amount of business that will be drawn back on post by the TLQ facility. The Consultant estimates that Fort Lee operations are directly responsible for approximately 436,350 room nights of demand within the private market, with almost 191,000 of this total from the training operations at the ALU. In FY2011, the net impact of Fort Lee operations is projected to total more than 879,000 room nights to the private sector. More than 647,000 room nights of this demand are ALU students. The development of the TLQ facility will remove 365,000 room-nights from the private market, leaving almost 507,000 room nights of demand during the first full year of operation at the TLQ. While the market will experience a substantial windfall in demand during FY2011 and the beginning of FY2012, the net positive impact to the lodging market will reduce after the TLQ facility is operational.

In terms of the LSP program’s influence on the health of local hotels, the average daily load of students needed to maintain the market at its current state after the TLQ is built is about 2,100 soldiers. Although recent ADL levels have been approximately 1,000 students, the increased training missions at the ALU are projected to grow to about 2,450 students, leaving a buffer of about 18% to 25% between the expected daily load and a minimum threshold needed to maintain current market equilibrium. However, if the needs of the Department of the Army were to change, Fort Lee’s average daily load might very well shift as well. Such a shift would likely have its greatest impact on those hotels farthest from Fort Lee, but on a regional scale, the shift would have to be significant enough to depress the average daily load below 2,100 in order to negatively affect the Study Region at large.

As mentioned, the new reservation procedure for LSP stays caused confusion within the Fort Lee Study Region. Simply put, the new procedures implemented for the FY2010 contracting round have redistributed stays from its former, evenly dispersed arrangement to an inconsistent, concentrated scenario which favors lodging facilities closest to Fort Lee and those facilities with the greatest favor to ALU students. Empirical and anecdotal data provided by local hotel operators shows that the new reservation system operated by the FMWRC Central Reservation Center is not as effective in guiding students to their assigned hotel. The change from the central billing method to self-pay also has created opportunities for students at the ALU to circumvent the reservations system by booking directly with hotel operators. Sufficient evidence was presented by hoteliers to document there are students staying at non-LSP sanctioned facilities. As such, these disruptions in historic patterns have caused long-time LSP participants to question the validity of current estimate and projection data. Unless the reservation system is adjusted, this trend is projected to continue into the future, with a favorable outlook for the Study Region as a whole but accompanied by a loss for specific hotels.

5 This figure does not include the Transportation or Ordnance Corps loads as well as non-LSP demand generators that could not be verified, such as the Defence Contracting Management Agency Learning Center.
5 CONSUMER SPENDING ANALYSIS

A. ON-POST COMMERCIAL SUPPLY ANALYSIS

1. Existing Commercial Inventory

The on-post retail, service and dining establishments at Fort Lee are operated by the Army and Air Force Exchange Service (AAFES). Businesses include national chain stores and restaurants, military outlets and unique service providers. It is important to note that the private-sector businesses on-post are contracted with AAFES and therefore considered to be operated by AAFES. The commercial establishments are located primarily in two complexes; the PX (Post Exchange) Complex and the PXtra Troop Mall Complex. Each complex is a one-story building complete with anchor stores, concession stores\(^1\) and a food court. Other on-post establishments are located in standalone buildings or within largely non-commercial structures, such as the new Army Logistics University building. This section describes the types of retail, service and dining businesses located on-post.

a) PX Complex

The PX Complex is the largest commercial building at Fort Lee. It is an enclosed structure and is anchored by the PX, which is similar to a department store offering a diverse mix of goods. The available items include clothing, electronics, media, sporting goods and home furnishings. It is reported by the AAFES Business Operations Manager that the PX occupies 100,750 square feet of space. The Consultant estimates that the entire complex is approximately 131,000 square feet, which results in the PX occupying nearly 77% of total floor space.

The concession stores in the PX Complex are comprised largely of retail-oriented businesses. These businesses include two beauty accessories stores, three cell phone stores and a florist (Table 5-1). Currently, only two service-related businesses are operating in the Complex; a barber shop and an internet café. However, an optometry clinic is scheduled to open in March 2010. It is estimated by the Consultant that each of these concession stores average 1,000 square feet of space based on other complex occupants and an allocation for common and private areas, such as hallways, restrooms and the food court dining area.

The PX Complex also includes a food court with five dining establishments. With a shared dining space, these restaurants are estimated to individually occupy between 500 and 700 square feet. Recently, any turnover occurring among restaurants at Fort Lee food courts has involved similar dining options. For instance, a Subway sandwich shop recently replaced a Robin Hood sandwich shop in the PX Complex.

b) PXtra Troop Mall Complex

The PXtra Troop Mall Complex is similar to the PX Complex in most respects, though it is slightly smaller in size. The Consultant estimates the complex at 85,000 square feet. It contains multiple concession stores, has a modest food court and is anchored by another PX. However, this PX, called the PXtra, is substantially smaller than the exchange at the PX

\(^1\) Concession stores are private businesses operating on military property.
Complex and includes a furniture store. In addition, the PXtra Troop Mall Complex includes other retail military outlets, such as a shoppette, a Class VI store and a Military Clothing Sales Store (MCSS). A shoppette is a convenience store offering necessary items, such as over-the-counter medicine, toiletries and snack foods. The Class VI ("six") store also sells convenience items, but has a large alcoholic beverage inventory. Lastly, the MCSS sells authorized military clothing, uniforms, accessories and weapons.

There is nearly twice the amount of concession stores (19 stores) in the PXtra Troop Mall Complex as in the PX Complex. Additionally, the concession stores at the PXtra Complex are more evenly distributed between retail and service. Among the eight service-oriented businesses is a car rental establishment, a computer repair center, a nail salon and a dry cleaner. Similar to the PX Complex, there are three stores specializing in cell phones and related accessories in the PXtra Complex indicating a strong demand for these items on-post.

The food court only consists of three establishments. Until recently, two of these restaurants were located in both exchange complexes; Robin Hood and Anthony's Pizza. While Robin Hood was replaced by Subway in the PX Complex, Anthony's Pizza in the PXtra Complex is being replaced with a Pizza Hut in March 2010. This turnover reemphasizes the efforts made to maintain similar offerings on-post.

c) Stand Alone Businesses
There are a few retail, dining and service establishments on post that operate outside of the exchange complexes. The largest of these establishments is the Commissary, which is the Fort's grocery store. Located adjacent to the PX Complex, the Consultant estimates that the Commissary building is approximately 75,000 square feet. This size is slightly larger than the 50,000 to 60,000 square feet of a typical grocery store. The substantial size allows for a wide and diverse array of grocery and household items. In addition, this Commissary benefits from the location of the Defense Commissary Agency (DeCA) headquarters at Fort Lee. According to the DeCA, goods are sold at the Commissary at cost plus a 5% surcharge equating to a savings of approximately 30%. The selection and discount is likely to ensure that the majority of grocery spending for military personnel residing on or near post will occur at the Commissary.

Other AAFES-operated businesses on-post includes a Burger King restaurant, a fuel/service station, a cafeteria, a book store, a coffee shop and a Laundromat. Of these establishments, the Burger King, fuel/service station and Laundromat maintain high visibility due to operating out of standalone facilities. However, the Laundromat also includes an interior Internet Café Cyber Zone business. Conversely, the coffee shop is located inside the Kenner Clinic while the book store and cafeteria are located in the Army Logistics Management College, which is part of the ALU facility. Additionally, the new ALU facility also includes new commercial establishments Einstein Bagels, Subway and a barbershop. Each of the aforementioned interior businesses cater primarily to the inhabitants and visitors in these buildings.

d) Competitive Advantage
The retail, dining and service businesses operated by AAFES maintain a cost advantage over local businesses operating off-post. In addition to the modest mark-up over cost for goods at the Commissary, all AAFES businesses exclude state sales tax (5%) from items. This extends from services rendered at the exchange complexes to the gas sold at the on-post service station.
Another advantage provided by AAFES is their price matching offer\(^2\). The program works in two ways. First, an AAFES cashier may match a competitor's price  \('on the spot' provided the difference for the item is less than ten dollars. Secondly, if the price difference for the item is greater than ten dollars, a shopper may show a competitor's advertisement displaying the lower price to the cashier and receive the reduced price, again  \('on the spot'). The relatively low costs and price matching program likely contribute to military personnel shopping remaining on-post provided these benefits are well-known.

### Table 5-1

**Existing On-Post Commercial Businesses**

<table>
<thead>
<tr>
<th>Business Name Operated By</th>
<th>Business Name Operated By</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PX Complex</strong></td>
<td><strong>Pxtra Troop Mall Complex</strong></td>
</tr>
<tr>
<td>Main Store AAFES</td>
<td>Pxtra/Shoppette/Class Six AAFES</td>
</tr>
<tr>
<td>Class VI AAFES</td>
<td>MCSS (Military Clothing Sales Store) AAFES</td>
</tr>
<tr>
<td>Barber Shop Concession</td>
<td>Alteration Shop Concession</td>
</tr>
<tr>
<td>GNC</td>
<td>Specialty Shop Concession</td>
</tr>
<tr>
<td>Hair 'n' More Concession</td>
<td>Wireless Accessories Concession</td>
</tr>
<tr>
<td>Sports Shop Concession</td>
<td>Jewelry Shop Concession</td>
</tr>
<tr>
<td>Sprint Concession</td>
<td>Barber Shop Concession</td>
</tr>
<tr>
<td>Flower Shop Concession</td>
<td>Sprint Concession</td>
</tr>
<tr>
<td>Optical Shop Concession</td>
<td>Computer Repair Concession</td>
</tr>
<tr>
<td>Cellular Accessories/Fonefrills Concession</td>
<td>Thompson Audio Concession</td>
</tr>
<tr>
<td>Internet Cafe Cyber Zone Concession</td>
<td>Laundry/Dry Clean Concession</td>
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<tr>
<td>Beauty Shop Concession</td>
<td>Air Brush Concession</td>
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<tr>
<td>Optometry Clinic (under construction) Concession</td>
<td>KC Fashion &amp; Shoe Repair Concession</td>
</tr>
<tr>
<td>Slides N More Jewelry Concession</td>
<td>Enterprise Car Rental Concession</td>
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<td>Anthony's Pizza #1 AAFES</td>
<td>GameStop Concession</td>
</tr>
<tr>
<td>Subway AAFES</td>
<td>Green Bean Coffee Concession</td>
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<tr>
<td>Cinnabon AAFES</td>
<td>Cultural Gift Shop Concession</td>
</tr>
<tr>
<td>Charley Steakery AAFES</td>
<td>T-Mobile Concession</td>
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<tr>
<td>Mandu Wok AAFES</td>
<td>Internet Café Cyber Zone Concession</td>
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<tr>
<td>Stand Alone Businesses</td>
<td>Anthony's Pizza #1 Concession</td>
</tr>
<tr>
<td>Car Care Center AAFES</td>
<td>Ohayo Concession</td>
</tr>
<tr>
<td>Burger King AAFES</td>
<td>Inside Logistics University Complex</td>
</tr>
<tr>
<td>Laundromat/Internet Café Cyber Zone Concession</td>
<td>Cafeteria AAFES</td>
</tr>
<tr>
<td>Coffee Shop in Kenner Clinic Concession</td>
<td>Einstein Bagels AAFES</td>
</tr>
<tr>
<td>Commissary DeCA</td>
<td>Subway AAFES</td>
</tr>
<tr>
<td>The HideAway FMWR</td>
<td>Bookstore AAFES</td>
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<tr>
<td>Lee Playhouse FMWR</td>
<td>Barbershop Concession</td>
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<td>Regimental Club FMWR</td>
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<td>The Lee Club FMWR</td>
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<tr>
<td>Bowling Center FMWR</td>
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<tr>
<td>Batting Cage FMWR</td>
<td></td>
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<tr>
<td>Cardinal Golf Club FMWR</td>
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</tr>
</tbody>
</table>

Source: AAFES, FMWR & RKG Associates, Inc., 2009

Note: DeCA is the Defense Commissary Agency

2. Pipeline Commercial Inventory

The BRAC action at Fort Lee includes the development of a wide variety of new facilities and operations on-post. Most recently, the new Army Logistics University center and Sustainment Center of Excellence were completed to account for increased military training activity. Along with the construction of these and other projected centers are proposed retail, dining and service establishments. Many of these commercial projects are underway or are expected to begin early in 2010.

Two notable commercial projects are currently under construction as well. These include the new car care center complex and the renovation of the Lee Playhouse. The car care center will have multiple businesses operating on-site and is projected to be completed and open in early 2010. The project will be anchored by a Firestone car care center that will include 24 fuel pumps, several service bays and a car wash. In addition, the complex will also include a Popeye’s chicken fast-food restaurant, a Class Six store and a shoppette. The Playhouse is currently being transformed into a facility that will be able to show movies in addition to hosting theater events. According to the AAFES Business Operations Manager, the movie theater will have limited operating hours due to the facility’s multiuse program. This limitation is likely to provide only modest levels of competition for larger cinema multiplexes located in the local region.

One other commercial project in the pipeline is slated to begin construction in early 2010. Located in the northern part of Fort Lee, this project will include a shoppette and a barber shop. According to AAFES, the project is scheduled to be completed in September 2010. These businesses would be the third on-post shoppette and the fourth barber shop.

There are a few new businesses that have recently opened or are scheduled to open in the on-post exchanges in addition to those previously mentioned. In the PXtra Troop Mall Complex, the space previously occupied by the Brigade Quartermaster now houses a Thompson Audio, which sells and installs car audio equipment. At the PX Complex, an optometry clinic is expected to open in April 2010. The optometry clinic will offer eye exams, a service not offered by the Optical Shop currently located in the PX Complex.

In terms of the TLQ facility, there is a proposed 300-seat dining facility to be included in the TLQ facility. Although there are no details about the operation or dining type of this facility, this new eatery likely will draw students who are staying at the TLQ.

In total, there is approximately 304,000 square feet of retail space currently on Fort Lee. The new development projects, including the dining facility at the TLQ, represent an increase of approximately 20,000 to 25,000 square feet, or 8% to 9% of the existing supply. This amount of new commercial space projected at Fort Lee is relatively disproportional to the anticipated personnel increase, as the ALU is projected to bring an average of 1,500 additional soldiers to Fort Lee each day. Although permanent party personnel levels are projected to decline slightly (approximately 400 persons) between 2009 and 2015, this loss is more than compensated for by the increase in ALU student growth levels. As such, it is likely that business activity occurring at the AAFES establishments will increase substantially due to this discrepancy. Additionally, businesses located off-post likely will experience modest levels of increased business activity due to the increase in area military personnel.

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B. ALU STUDENT SURVEY

RKG Associates conducted a survey to analyze the spending activity of military personnel at Fort Lee, specifically the students attending classes at the Army Logistics University. The survey was designed to help identify the types of goods and services typically purchased by the local military population and where these purchases occur. The findings of the survey will provide a clearer understanding of the demand for retail, service, dining and hospitality both on- and off-post.

1. Methodology

RKG Associates designed the Fort Lee spending habit survey to be conducted online. The survey was built using Survey Monkey, an online tool that provides templates for survey creation and analysis. Once the survey was created, the Consultant purchased a simple domain name, www.fortleesurvey.com, to enable potential respondents to easily connect to the survey. The survey was administered online from December 17, 2009 through January 4, 2010. The results were then collected and analyzed by the Consultant on January 6th.

The survey was intended to be brief and consists of eleven questions. These questions are separated into two sections: Background and Spending Activities. The five questions in the Background section focus on the individual respondent's rank/grade, training schedule, mode of transportation and lodging situation. Clarifying the profile of each respondent provides greater insight into their related spending habits. The Spending Activities questions revolve around the respondent's dining, retail and grocery purchases on- and off-post. Questions include ranking the types of businesses each respondent would like to see on-post, the types of purchases made on- and off-post and how often meals, goods and services are purchased off-post.

Advertising the survey to the Fort Lee military population occurred in two ways. Since the survey is directed at ALU students, the Consultant designed an advertisement that was placed in the Fort Lee Traveller and in lobbies of hotels participating in the Lodging Success Program (LSP), where many ALU students reside during their training. The ad occupied a quarter-page in the December 17th issue of the Traveller directing ALU students to the online survey. The advertisement was also enlarged onto letter-sized sheets of paper and distributed to the LSP hotels by a representative of the Crater Planning District Commission (PDC). In an effort to maximize responses, a raffle for a $100 gift certificate to Best Buy was included for those completing the survey and mentioned in the advertisement. It is important to note that the Consultant was limited to advertising the survey outside of any ALU classrooms by the Office of the Staff Advocate General.

There were 26 survey respondents, 19 of which completed the survey. The relatively low number of responses is likely due to the limitation of advertising outside of the classroom and during the holiday season. While the 19 responses are not enough to justify scientific conclusions of spending activity, the completed responses provide a basis for understanding the purchasing habits of the respondents.

2. Respondent Profile

The profile of the survey respondents share many commonalities. Most of the respondents (15) are classified as officers. Of these, 13 reported an O-1 rank. The four enlisted personnel are classified as either E-6 or E-7. The training schedules for the respondents vary widely, but 15 report to be at the Fort for at least ten weeks during their current stay. This length of time ensures that the majority of trainees will be active purchasers of local goods and services for daily and longer term needs. Additionally, all but one of the respondents report having their own car with them allowing them to venture off-post for goods and services. The lone respondent without a personal car uses the shuttle service to get to the hotel where he/she is residing. Lastly, 18 of the 19 respondents claim to be staying at a local hotel during their training session. The other respondent also reports to be off-post, but at an undisclosed location.
3. Spending Habits

a) Off-Post Spending Habits
A majority of meals consumed by the 19 survey respondents are eaten off-post. Of the three primary meals, breakfast and dinner are eaten off-post an average of 70% and 77%, respectively, off-post during any given week. Conversely, lunch is eaten off-post an average of 50% of the time. The lower off-post lunch consumption is likely due to convenience as students are on-post during the middle of the day for class. Additionally, there is a more diverse selection of breakfast and dinner options located off-post, where most of the respondents reside. Lastly, most of the dining options on-post closes by 6 or 7PM during the week. The standalone Burger King is the only restaurant reporting operating hours after 7PM.

Most of the students shop for non-dining goods and services at least once per week. In fact, only five state that they shop off-post less than once per week. However, this finding may be slightly inflated as all but one of the respondents report having access to personal transportation.

Groceries are the most frequently purchased item or service off-post. More than half (12) of the survey respondents rank groceries as their most frequently purchased item. The other seven students state fast food (3) and sit-down (4) restaurants as their most frequent off-post expense. The fact that dining and food account for the most frequent purchases is likely due to the lack of kitchen facilities in many of the local hotels.

Among the other frequent off-post purchase choices in the survey, seven respondents stated that recreation and entertainment venues were among their top three purchases off-post. While it may lack the capacity for larger crowds, the on-post movie theater currently under construction may absorb some of this demand as recreation and entertainment venues are largely unavailable on-post.

b) Purchase Allocation
Most of the spending activity of the survey respondents occurs off-post (Figure 5-1). On a weekly basis, the average amount spent off-post on retail, service and dining purchases is nearly $245. Conversely, the average spent on-post for the same types of goods and services is approximately $70. It is important to note; however, that these findings reflect survey submissions from a military population residing off-post.

The largest average weekly expenditures occurring off-post and on-post are for groceries. Survey respondents spend a weekly average of $23 on-post for groceries versus $64 off-post. This finding is surprising given the substantial discounts available for military personnel at the Commissary located on-post. In fact, 15 of the respondents spend more money weekly on groceries off-post than on-post. This pattern is likely a result of convenience as some grocery stores may be located close to the LSP hotels.

The only category that respondents spend more money on-post than off-post is health/personal care items. Students completing the survey stated that they spend an average of $16/week on items such as deodorant and toothpaste on-post versus $7 off-post. These items are widely available at any of the shoppettes, the Commissary or Class VI stores on-post.

One of the categories with relatively low levels of total spending activity is recreation and entertainment venues ($13). While this category ranked high among most frequented places, the amount of money spent at these venues is low. Of the 19 respondents, only ten reported having spent any money on a weekly basis at recreation or entertainment venues. However, of these ten, the average amount spent on a weekly basis is $26.
c) **Requested On-Post Businesses**

The final question posed in the survey asked each respondent to rank his/her level of interest in seeing additional businesses in various commercial categories on-post. The respondent provided a number between 1 and 10 for each category with 1 representing the most interest and 10 the least. It should be noted that for display purposes, the Consultant combined responses equating to 1 through 3 for most interested, 4 through 7 for somewhat interested and 8 through 10 for least interested. The result of this inquiry is that respondents are highly interested in seeing more commercial businesses on-post in nearly every category (Figure 5-2).

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**Figure 5-1**

**COMMERCIAL EXPENDITURES**

*Weekly Average; On-Post vs. Off-Post*

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**Figure 5-2**

**REQUESTED ON-POST COMMERCIAL BUSINESSES**

*Survey Results*

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Source: RKG Associates, Inc. 2010
The highest interest is in additional recreation and entertainment venues, eating and drinking establishments and grocery stores. With the exception of the coffee shops on-post, this finding is reflective of the lack of non-fast food restaurants and entertainment venues on-post. However, it also shows that most of the respondents are either unaware of the Commissary or prefer to shop for groceries off-post.

On the other hand, survey respondents maintain relatively low levels of interest in additional personal services and automotive parts and services. This finding likely reflects the numerous available hair care businesses already on-post, such as the three barber shops, beauty shop, hair shop and shoppettes. As for the low level of interest in increased automotive parts and services establishments, it is likely that most respondents view their stay to be short enough that these services will largely be unneeded.
6 FISCAL IMPACT ANALYSIS

A. INTRODUCTION

In addition to the market impacts created by the construction of the Temporary Living Quarters (TLQ) detailed in the previous chapters, the Consultant also analyzed the potential tax revenue impacts the new development at Fort Lee related to the expansion of operations at the Army Logistics University (ALU). From the lodging perspective, the Consultant measured how the TLQ facility would impact transient occupancy tax revenues and local sales tax revenues generated by short-term lodging stays within the region. For this analysis, the Consultant compared current estimated revenue generation related to Fort Lee business and projected future revenue streams accounting for the expanded mission of the ALU and the construction of the TLQ. From a retail perspective, the Consultant studied the potential impacts to retail spending habits of removing 1,000 soldiers from off-post housing and placing them on-post. The result of this effort measured the potential changes to local sales tax revenue generated by the ALU student body.

B. FISCAL IMPACT ANALYSIS

This section details the impact of Fort Lee-related hotel stays on the transit occupancy and sales tax revenues for the Study Region's six cities and counties. These tax revenues are driven by the stays allocated in the gravity modeled discussed in earlier chapters.

1. Transient Occupancy Tax Impacts

Cities and Counties within Virginia are allowed to levy a lodging tax, or transient occupancy tax (TOT). This tax effectively is an enhanced sales and use tax dedicated to short-term lodging stays. The legislation governing TOT is quite involved, as Counties and Cities are treated differently by the State. Counties TOT powers are legislated by the State, with a series of Code Sections dedicated to which Counties are allowed to charge what tax amounts.\(^1\) In contrast, Virginia's incorporated Cities establish their own rates and terms within their city code. Local rates and terms are as follows:

- Chesterfield County – 8.0% for all stays 30 days or less
- Colonial Heights – 8.0% for all stays 90 days or less
- Dinwiddie County – 2.0% for all stays 30 days or less
- Hopewell – 8.0% for all stays 30 days or less
- Petersburg – 6.0% for all stays 30 days or less
- Prince George County – 5.0% for all stays 30 days or less

The Consultant used these rates and terms to determine a current estimate and future projections of TOT revenue by jurisdiction based on growth in Fort Lee stays and the impacts of the TLQ facility. To accomplish this, the Consultant used several data points and assumptions, including:

\(^1\) Code of Virginia 58.1-3819 to 3826
The breakout of hotel room night demand by jurisdiction was taken directly from the hotel market analysis projection model detailed in the previous chapters.

In order to reflect current market conditions, LSP demand is allocated based on preference of the student rather than hotel assignment through the CRC process. This assumption allows the model to calibrate how introducing choice into the market will impact individual jurisdictions.

ALU class listing information for FY2009 and FY2011 indicates that approximately 20% of all ALU-related stays are fewer than 30 days. As such, jurisdiction with policies exempting stays over 30 days capture TOT from 20% of their LSP room demand.

The same class listings indicate approximately 90% of all stays are fewer than 90 days, indicating Colonial Heights will capture TOT revenues from 90% of LSP-related stays.

All non-LSP stays are expected to be shorter than 30 days, making them all eligible to be taxed under the TOT guidelines.

All LSP stays are assumed to be charged the $70 per diem rate less the 8% mandated discount from the LSP contract.

All per diem stays are assumed to be charged the $70 per diem rate.

All private market stays are assumed to pay the average daily room rate for the given municipality’s hotels and motels (ranging between approximately $50 and $115).

a.) Fort Lee Study Region Impacts

The Consultant estimates that the Fort Lee Study Region jurisdictions collected approximately $1.58 million in TOT from Fort Lee related stays in FY2009. Most of the revenue was generated by per diem stays as a result of the relatively similar demand loads between LSP and per diem business. Revenues are projected to peak in FY2011, when the ALU is slated to be fully operational but the TLQ facility is not complete. TOT related revenues are projected to increase more than $900,000 from FY2009 levels, to $2.16 million (Figure 6-1). After the TLQ is operational, the average annual TOT revenue for the Study Region is projected to be slightly higher than current year estimates, at approximately $1.44 million.

b.) Tax Revenue Reallocation Impacts

Despite the overall benefit to the Fort Lee Study Region lodging market, the changes to the LSP process has resulted in shifts of demand capture within the Region. As mentioned throughout this analysis, the current reservation process is not delivering the room night demand to the LSP hotels as efficiently as has been done in the past. Introducing preference and choice into the reservation process has benefitted some communities more than others.
Fiscal year 2009 estimates indicate Petersburg constituted the greatest share of TOT, at an estimated $375,099 (Figure 6-2). However, the growth in market demand and the influence of adding choice to the market has changed this situation. In FY2011, TOT revenues are projected to reach a peak, with Colonial Heights ($624,592) and Chesterfield County ($637,475) both exceeding the Petersburg ($356,276) capture level. Not factoring the windfall revenues that occur in FY2011 and the beginning of FY2012, the net change from current estimates to the end study year varies by community. Chesterfield County and Colonial Heights both experience substantial gains in TOT revenue levels ($97,900 and $152,100 respectively). In contrast, Petersburg and Hopewell both experience a slight loss. This difference occurs for two primary reasons. First, the growth in LSP stays, and the success of LSP hotels within Petersburg and Hopewell, displaces some higher-paying per diem stays. As such, the level of occupancy remains stable, but the taxable value of those stays decreases. Second, Chesterfield County and Colonial Heights have greater concentrations of hotels that rank higher in the model. As such, new demand placed in the market will disproportionately be captured in these areas. While the model's limitations do preclude any definitive findings, the analysis reveals that changes in the LSP program and the growth of LSP demand in the region does influence the taxable position of the host communities.

2. Lodging-Related Local Sales Tax Impacts

The Commonwealth of Virginia's sales tax rate is 5%, with 4% directly allocated to the state and a 1% optional allocation for localities. All six localities have implemented the 1% sales tax revenue. In the case of lodging, stays lasting more than 90 days are not charged sales tax. To this end, the Consultant followed a similar methodology for this analysis as for the TOT analysis, replacing the tax rates (1% for all jurisdictions) and the policy length of stay limitations (90 days). The result of this effort produced a jurisdiction-based assessment of local sales tax revenue projections related to Fort Lee operations.

Similar to the TOT analysis, the Region experienced a net gain in sales tax revenue from lodging stays, increasing from an estimate of $252,166 in FY2009 to $305,800 in FY2015. However, the distribution of revenues has changed. Most notably, Petersburg and Prince George County represent the largest share of tax revenue within the Study Region for each year of the study (Figure 6-3). This contrasts TOT findings, where Colonial Heights and Chesterfield County account for the largest share. This disparity reflects the impacts of only being able to tax stays shorter than 30 days. Petersburg and Prince George are heavily influenced by LSP stays, which typically last longer than 30 days. As such, their respective TOT revenues do not reflect the level of activity.
In addition, each jurisdiction experiences a net gain in sales tax revenue between FY2009 and FY2015. The growth of LSP stays in Petersburg and Hopewell without similar growth in non-LSP stays have driven down the net taxable value and the amount of taxable stays under the TOT legislation. In contrast, the 90pday exemption for sales tax leaves most of these stays “on the books” and increases the net taxable amount of room revenue for all communities.

3. Retail Local Sales Tax Impacts

The Consultant calculated the potential impact on retail expenditure-related sales tax revenues by measuring the spending habits of ALU students. As detailed in the last chapter, the Consultant performed a survey of ALU students to gauge differences in spending habits on- and off-post for students stationed in the community and students stations on Fort Lee. This survey provided insight into the average daily spending patterns of students housed off-post. Utilizing this data, the Consultant then estimated spending habits of on-post soldiers, accounting for access and proximity to the venue offered at the PX, PXtra and stand-alone operations. Finally, the Consultant adjusted the spending habits for both on-post and off-post soldiers as a result of the new commercial development proposed for Fort Lee (detailed in the previous chapter. The result was spending estimates that allowed the Consultant to test how growth in student population, and subsequent recall of 1,000 students to on-post housing will impact retail sales tax revenues. The projection model considers the following assumptions:

- Off-post students will spend at a level similar to those surveyed, in terms of total dollar amount and distribution between on-post and off-post businesses.
- On-post students are estimated to spend less off-post on certain items. The model interprets spending habits for eleven different retail categories. Adjustments were made to reflect availability on-post.
- Current spending patterns on-post reflect approximately 16.5% is done at non-AAFES businesses, making those sales subject to sales tax. As such, the Consultant allocated on-post spending following these trends.
- The Consultant removed all categories (i.e. groceries) that has tax exempt status in Virginia from the daily spending rates to eliminate overstating impact.
- According to AAFES information provided to the Consultant, the development of new retail venues by FY2011 will shift the concentration of taxable stores on post. As a result, the model assumes a greater share of on-post spending will be taxable starting in FY2011
- As a sensitivity analysis, the Consultant ran two additional scenarios estimating on-post housing. The “moderate” scenario reflects the projected spending habits of students. The “aggressive” scenario assumes on-post students’ spending behaviors more closely reflect off-post students, giving greater weight to off-post spending. The “conservative” scenario assumes on-post students are less likely to patronize off-post facilities.
Retail operations in the Fort Lee Study Region benefit from the growth of the ALU student population. Between FY2009 and FY 2015, more than 444,000 room-nights of demand for lodging will be added to the Region. While much of this demand will be housed at the TLQ facility, the total amount of consumed retail goods and services will increase. At a base level, the net number of off-post student stays will increase between FY2009 and FY2015. This growth in off-post stays is projected to result in additional off-post spending. Additionally, the growth in on-post stays will result in some additional spending off-post. The most substantial difference will occur when the TLQ facility becomes operational. Similar to the hotel market analysis, revenues to the jurisdictions is projected to decline at this point, but remain above the current estimate levels.

The Fort Lee Study Region is estimated to capture approximately $112,400 in retail sales tax for FY2009 (Figure 6-4) on approximately $22 million in total spending. Spending on non-taxable goods and at AAFES-owned businesses total nearly $10.8 million. Tax revenues are projected to peak in FY2011, likely ranging from $198,000 to $209,000 on almost $38 million in total retail spending. This change reflects the “maximum” tax impact, as all of the new LSP stays are housed off-post. Once the TLQ facility is operational, the net spending level is not projected to shift, however, on-post and off-post allocation will. As a result, the soldiers locating on-post likely will spend less in the community. The Consultant projects that FY2015 retail sales tax revenue will range between $167,000 and $197,000.

Simply put, bringing these soldiers back onto post will increase spending at non-taxable venues, such as the commissary at the expense of off-post retailers. However, the net difference between FY2009 and FY2015 indicates the peak of the market is a windfall, and off-post and on-post businesses will ultimately benefit. The allocation within the six jurisdiction likely will change more severely, as additional on-post spending (at taxable businesses) likely will reflect a transfer from surrounding communities to Price George County. Being the retail hub for the Crater region, Colonial Heights likely stands to lose the most if more soldiers are recalled on-post. However, it is not possible to model retail spending habits of all ALU students, so a detailed assessment of jurisdictional allocation has not been completed.

C. IMPLICATIONS

The next several years are projected to deliver millions of dollars in tax revenue to the Fort Lee Study Region. The economic impact analysis indicates that the six Crater PDC jurisdictions most impacted by the Fort Lee expansion will realize a cumulative increase in transient occupancy tax and local sales tax related to hotels stays and retail expenditures (Figure 6-5). The Region is projected to experience a one-time windfall of tax revenue of $1.4 million during FY2011 and the beginning of FY2012. This windfall ends as a result of the opening of the TLQ. At this time, the amount of TOT revenues and hotel-related sales tax revenues are projected to decline to a level below the peak, but above current revenue estimate levels. However, the Study Region also is projected to experience a sustained net
increase in tax revenue of more than $260,000 annually as a result of the increase operations at Fort Lee.

However, it was noted that the shift in demand due to the increased market activity and the inefficiencies in the current implementation of the LSP has resulted in creating bigger “winners” within the Study Region in terms of net new tax revenues. The data indicate that Colonial Heights and Chesterfield County are poised to experience a larger share of this net gain over communities such as Hopewell and Petersburg. While the details of the retail sales tax revenues are not complete for a jurisdiction-level analysis, it is reasonable to assume Prince George County will benefit the most, as the County collects all on-post sales tax revenue.

Given the relatively imminent nature of the bulk of these stays, the most effective means by which a municipality might try to increase its projected tax revenues may be to increase its TOT rate and the length of stays that qualify for exemption. Colonial Heights serves as a prime example, utilizing an 8% rate (among the highest) and only exempting stays of more than 90 days, while all other municipalities exempt stays of more than 30. This is significant given that approximately 90% of all LSP stays fall below 90 days, while only 20% fall below 30 days. This situation is evident in the fact that Colonial Heights only hosts four of the Study Region’s 57 hotels (7%), but is projected to capture up to 30% of collected TOT and 17% of hotel-based sales tax related to Fort Lee stays in 2012. The analysis indicates that Colonial Heights’ relative effectiveness in generating tax revenue from Fort Lee-related stays is due to its TOT policy. Hence, it is suggested that municipalities consider altering their policies in similar ways in order to capture additional revenues in the coming years. Doing so, especially in communities within significant hotel supply, offers the possibility of increased tax income as Fort Lee-generated demand is projected to take up much of the Study Region’s supply during its peak years.