Mode Split Assumptions

Residential Component

Description of residential component of project:

approximately 50 residential units (with a total of 185 beds)

Pertinent Mode Split data from other sources:

Information Source	Mode						
	SOV	Carpool	Transit	Bike	Walk	Telecommute	Other
Cenus Data - Census Tract (99.04)	37%	12%	46%	0%	3%	1%	1%
CTPP - TAZ Residents (20371)	31%	13%	51%	0%	0%	5%	0%
State of the Commute (of District residents)	41%	7%	41%	11%		---	

Mode Split assumed in TIS:

Land Use	Mode				
	Drive	Transit	Bike	Walk	Telecommute/Other
Residential Mode Split	0%	90%	0%	10%	---

Notes: -Census data and WMATA Ridership Survey used as basis for assumptions
-No-on site parking will be provided
-Low-car ownership rates assumed

STFH Staff Component

Description of office component of project:

There will always be approximately 12 staff on site, with 25-27 staff being present at peak staffing times.

Pertinent Mode Split data from other sources:

Information Source	Mode						
	SOV	Carpool	Transit	Bike	Walk	Telecommute	Other
State of the Commute (of employees that work in the District)	42%	11%	43%	4%		---	
CTPP - TAZ Employees (20371)	60%	7%	17%	1%	6%	0%	9%
Existing Mode Split (based on information provided by Applicant)	60%		40%	0%	0%	0%	0%

Mode Split assumed in TIS:

Land Use	Mode				
	Drive	Transit	Bike	Walk	Telecommute/Other
STFH Staff Mode Split	50%	42%	5%	3%	---

Notes: -Information provided on existing facility at DC General by DGS used as basis for assumptions

Medical Clinic Component

Description of Clinic component of project:
Approximately 7,860 square feet

Pertinent Mode Split data from other sources:

Information Source	Mode						
	SOV	Carpool	Transit	Bike	Walk	Telecommute	Other
State of the Commute (of employees that work in the District)	42%	11%	43%	4%		---	
CTPP - TAZ Employees (20371)	60%	7%	17%	1%	6%	0%	9%

Mode Split assumed in TIS:

Land Use	Mode				
	Drive	Transit	Bike	Walk	Telecommute/Other
Clinic Mode Split	30%	20%	5%	45%	---

Notes: -The clinic is intended to serve the neighborhood, and as such it is expected that the majority of patients will walk

Table 1 - Residential Trip Generation

Step 1: Base trip generation using ITEs' *Trip Generation*

Land Use	Land Use Code	Quantity (x)	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Residents	220	50 du	6 veh/hr	22 veh/hr	28 veh/hr	29 veh/hr	16 veh/hr	45 veh/hr
		Calculation Details:	*20%*	*80%*	*=0.49(x)+3.73*	*65%*	*35%*	*=0.55(x)+17.65*

Step 2: Convert to people per hour, before applying mode splits

Land Use	People/Car (from 2009 NHTS, Table 16)	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Residents	1.13 ppl/veh	7 ppl/hr	25 ppl/hr	32 ppl/hr	33 ppl/hr	18 ppl/hr	51 ppl/hr

Step 3: Split between modes, per assumed Mode Splits

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Residents	Auto	0%	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr
Residents	Transit	90%	6 ppl/hr	23 ppl/hr	29 ppl/hr	30 ppl/hr	16 ppl/hr	46 ppl/hr
Residents	Bike	0%	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr
Residents	Walk	10%	1 ppl/hr	2 ppl/hr	3 ppl/hr	3 ppl/hr	2 ppl/hr	5 ppl/hr

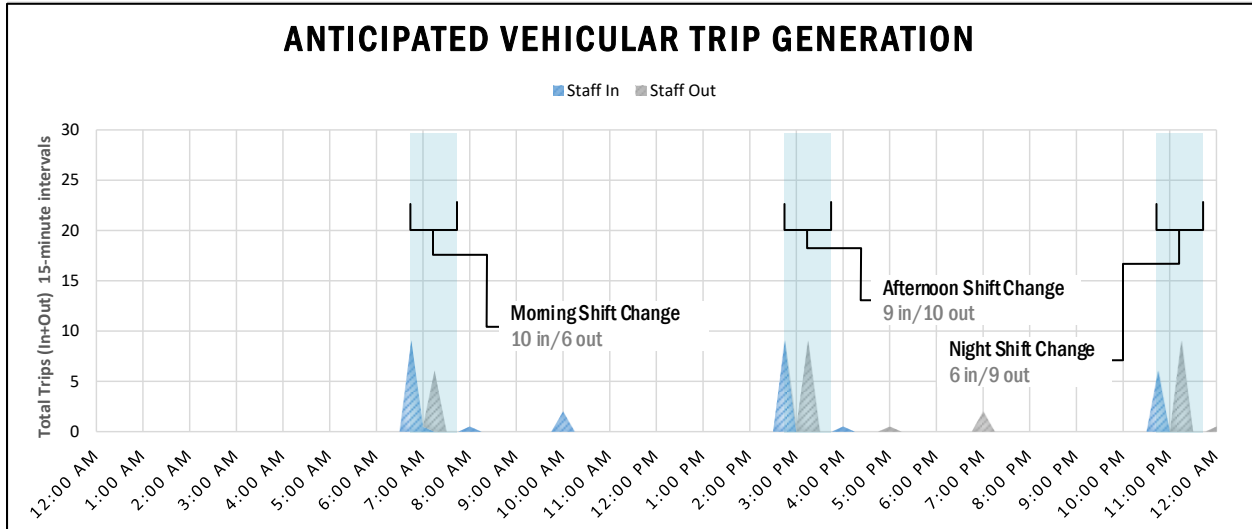Step 4: Convert auto trips back to vehicles/hour

Land Use	People/Car (from 2009 NHTS, Table 16)	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Residents	1.13 ppl/veh	0 veh/hr	0 veh/hr	0 veh/hr	0 veh/hr	0 veh/hr	0 veh/hr

Trip Gen Summary for Residential

Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Auto	0 veh/hr	0 veh/hr	0 veh/hr	0 veh/hr	0 veh/hr	0 veh/hr
Transit	6 ppl/hr	23 ppl/hr	29 ppl/hr	30 ppl/hr	16 ppl/hr	46 ppl/hr
Bike	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr
Walk	1 ppl/hr	2 ppl/hr	3 ppl/hr	3 ppl/hr	2 ppl/hr	5 ppl/hr

Ward 6 Short Term Family Housing – Anticipated Vehicular Trip Generation and Parking Demand (STFH Staff)

Based on Gorove/Slade analysis of information provided by District Department of General Services staff

ANTICIPATED VEHICULAR TRIP GENERATION

■ Staff In ■ Staff Out

Morning Shift Change
10 in/6 out

Afternoon Shift Change
9 in/10 out

Night Shift Change
6 in/9 out

Land Use	Mode	Morning Shift Change (6:45-7:45AM)			Afternoon Shift Change (2:45-3:45PM)			Night Shift Change (10:45-11:45PM)		
		In	Out	Total	In	Out	Total	In	Out	Total
STFH Staff	Auto	10 veh/hr	6 veh/hr	17 veh/hr	9 veh/hr	10 veh/hr	19 veh/hr	6 veh/hr	9 veh/hr	15 veh/hr
Total	Auto	10 veh/hr	6 veh/hr	17 veh/hr	9 veh/hr	10 veh/hr	19 veh/hr	6 veh/hr	9 veh/hr	15 veh/hr

Anticipated Parking Demand

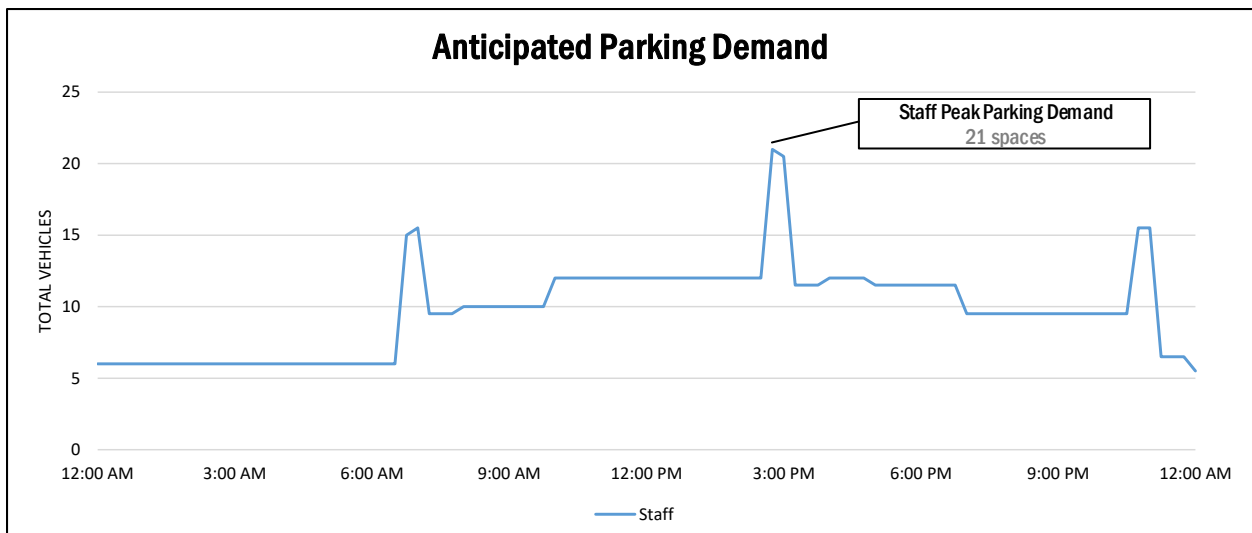Staff Peak Parking Demand
21 spaces

— Staff

Table 3 - Medical Clinic Trip Generation
Note: A 7,860 sf Medical Clinic

Step 1: Base trip generation using ITEs' *Trip Generation*

Land Use	Land Use Code	Quantity (x)	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Medical Offic	720	7,860 sf	15 veh/hr	4 veh/hr	19 veh/hr	8 veh/hr	22 veh/hr	30 veh/hr
		Calculation Details:	*79%*	*21%*	*=2.39(x/1000)*	*28%*	*72%*	*=0.90(x/1000)+1.53*

Step 2: Convert to people per hour, before applying mode splits

Land Use	People/Car (from 2009 NHTS, Table 16)	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Medical Offic	1.13 ppl/veh	17 ppl/hr	4 ppl/hr	21 ppl/hr	9 ppl/hr	25 ppl/hr	34 ppl/hr

Step 3: Split between modes, per assumed Mode Splits

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Medical Offic	Auto	30%	5 ppl/hr	1 ppl/hr	6 ppl/hr	3 ppl/hr	7 ppl/hr	10 ppl/hr
Medical Offic	Transit	20%	3 ppl/hr	1 ppl/hr	4 ppl/hr	2 ppl/hr	5 ppl/hr	7 ppl/hr
Medical Offic	Bike	5%	1 ppl/hr	0 ppl/hr	1 ppl/hr	0 ppl/hr	2 ppl/hr	2 ppl/hr
Medical Offic	Walk	45%	8 ppl/hr	1 ppl/hr	9 ppl/hr	4 ppl/hr	11 ppl/hr	15 ppl/hr

Step 4: Convert auto trips back to vehicles/hour

Land Use	People/Car (from 2009 NHTS, Table 16)	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Medical Offic	1.13 ppl/veh	4 veh/hr	1 veh/hr	5 veh/hr	3 veh/hr	6 veh/hr	9 veh/hr

Trip Gen Summary for Retail

Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Auto	4 veh/hr	1 veh/hr	5 veh/hr	3 veh/hr	6 veh/hr	9 veh/hr
Transit	3 ppl/hr	1 ppl/hr	4 ppl/hr	2 ppl/hr	5 ppl/hr	7 ppl/hr
Bike	1 ppl/hr	0 ppl/hr	1 ppl/hr	0 ppl/hr	2 ppl/hr	2 ppl/hr
Walk	8 ppl/hr	1 ppl/hr	9 ppl/hr	4 ppl/hr	11 ppl/hr	15 ppl/hr