



TO:	Walters Lacey, LLP	DATE:	October 20, 2025
FROM:	Brian Beisel	HSH PROJECT NO.:	2025214
SUBJECT:	GCTS – Trip Generation Analysis		

Howard Stein Hudson (HSH) has investigated the transportation impacts of the Gordon Conwell Theological Seminary (GCTS) campus in Hamilton, Massachusetts. HSH obtained statistics regarding the activity on site, both from the recent past and the current operations. HSH has also calculated potential developments that could occur on site without impacting the transportation infrastructure on site or the roadways surrounding the site in the vicinity beyond the impact that has recently been experienced.

Recent Historical Site Usage

Based on information provided to HSH, the GCTS operations on site including 209 residential apartments plus student dormitories, provided approximately 545 students (including 400 commuter students arriving/departing from the site daily), and 215 staff members (also arriving/departing from the site daily). These statistics were used to determine the weekday daily, weekday AM peak hour, and weekday PM peak hour trip generation.

HSH utilized the Institute of Transportation Engineers (ITE) manual, [Trip Generation, 11th Edition](#), to determine the trip generation associated with the residential apartments. In addition, HSH utilized the empirical data provided to determine the trip generation of the commuter students and staff. This results in 2,630 trips (1,315 in and 1,315 out) recently travelling to and from the site during the course of a typical weekday. The majority of these trips occurred during the weekday AM peak hour (travelling to the site) and the weekday PM peak hour (travelling from the site). The recent trip generation of the site was calculated to be 690 trips (630 trips in and 60 trips out) during the weekday AM peak hour and 715 trips during the weekday PM peak hour (65 trips in and 650 trips out).

Current Site Usage

HSH conducted the same analysis for the current GCTS operations on site. This continues to include approximately 209 residential apartments based on ITE rates. However, the commuter students have been reduced to approximately 30 commuter students arriving/departing from the site and 90 staff members also arriving/departing from the site. In order to be conservative, the trip generation of the apartments was considered to be constant from previous operations. However, with the reduced students and staff, the GCTS campus is currently generating approximately 1,650 trips (825



in and 825 out) during the course of a weekday. The current trip generation of the site was calculated to be 205 trips (140 trips in and 65 trips out) during the weekday AM peak hour and 225 trips during the weekday PM peak hour (65 trips in and 160 trips out).

Residential Trip Generation Trends

As stated, the residential apartments on site have been considered to have consistent trip generation impacts for the two periods analyzed. However, data from the recent editions of the ITE manual indicates that peak hour trip generation for residential uses has declined over the past decades. This trend appears to be due to several factors including 1, more diverse work day hours (not as many working strictly 9 to 5); 2, a continued increase in work from home (even before 2020 and Covid); and 3, online shopping reducing non work trips to and from residential units. While it is true that there are more deliveries to residential units (and loading docks and service facilities of multi-use buildings should be designed to respond to this increased activity), the deliveries actually reduce the overall number of trips since one delivery vehicle can service orders from multiple vendors and multiple residential units, reducing the trips by residents to and from individual homes.

Potential Redevelopment

Based on the current GCTS campus operating with a greatly reduced transportation impact compared to the recent past activity of the campus, residential units could be developed on a portion of the campus while maintaining current GCTS operations without exceeding the previous trip generation volumes that were being experienced. Based on the trip generation analysis, the site is currently generating approximately 980 vehicles less (1,650 compared to 2,630) during the course of a weekday, 485 vehicles less (205 compared to 690) during the weekday AM peak hour, and 490 vehicles less (225 compared to 715) during the weekday PM peak hour.

HSH utilized the ITE manual, specifically Land Use Code “Senior Adult Housing – Multifamily”, to determine the trip generation of potential redevelopment of portions of the site while maintaining the current operations of the GCTS. Based on the rates for over 55 age-restricted housing, there could be approximately 300 units added without exceeding the previous daily trip generation of the site. Since the previous operations were peak hour intensive (compared to the rest of the day) there could be substantially more units added without exceeding the previous peak hour volumes.

Campus Transportation Infrastructure

The roadways of the GCTS campus provide the ability for the dispersion of the trip generation volumes discussed previously. With access/egress in three directions (Bridge Street to the north,



Woodbury Street to the east, and Essex Street to the south) the traffic volumes are not experienced at a single point within the campus and more importantly within the surrounding community. Even with the hypothetical development associated with the daily traffic (300 units), this would result in the surrounding streets providing access to the GCTS site experiencing approximately one extra vehicle per minute during the peak hours. On site, the same dispersion of traffic can be accommodated by the existing roadways. The same onsite roads have already experienced much higher peak hour traffic volumes in the recent past with the more intense GCTS campus usage.