



Gorrill-Palmer Consulting Engineers, Inc.

*Engineering Excellence Since 1998*

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August 19, 2014

Deirdre Nice, Executive and Artistic Director  
St Lawrence Art Center  
76 Congress Street  
Portland, ME 04101

Subject: Parking Demand Management Plan  
St. Lawrence Arts Center  
76 Congress Street Portland, Maine

Dear Ms Nice:

Gorrill-Palmer Consulting Engineers, Inc (GP) completed an evaluation of the parking demand anticipated when the capacity at St Lawrence Arts (SLA) on Congress Street in Portland is expanded from 110 to 485 seats and worked with SLA to develop a Parking Demand Management Plan. While maximum seating in the proposed auditorium is 401, there are other rooms that could be occupied at the same time with an additional capacity of 84 people. While this is unlikely, it will be the assumed case in our parking plan. This report takes into consideration the comments and suggestions provided by an outside peer review (Nelson Nygaard Consulting) on the first TDM completed January, 2014, as well as input from City of Portland planning staff. GP and SLA appreciate that the peer review focused on tangible solutions to discourage patrons of SLA from seeking parking primarily on residential streets directly near the building. SLA plans to implement a combination of solutions to successfully mitigate a parking problem for Munjoy Hill residents, and businesses, as well as patrons of SLA.

### **Estimate of Parking Demand**

There are three potential sources to estimate the parking demand for the facility. Each of these sources is discussed below:

#### *Institute of Transportation Engineers*

The Institute of Transportation Engineers (ITE) publication, "Parking Generation, 4th Edition" presents parking rates for various land uses based on studies across the country. Land Use 441, Live Theater projects an average parking ratio of 0.38 vehicles per attendee with a range of 0.37 to 0.40 vehicles per attendee based on rural sites with an average of 800 attendees. The information was based on four studies. Since SLA is only projected to have 485 attendees and the trip rate increases with fewer attendees, the rate would likely be closer to 0.40 vehicles per attendee.

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*St Lawrence Arts Survey Data*

SLA has furnished our office with the results of surveys of attendees to two Friday night shows which started at 7:30 p.m. on October 25, 2013 and December 13, 2013. The results are summarized below:

DATE	ATTENDANCE	SURVEYS COMPLETED	PARKING RATIO	NO. OF VEHICLES
10-25-13	103	103	0.54	56
12-13-13	110	110	0.40	44

It is our understanding that the October show attracted an older crowd and therefore the number of people traveling by car may have been higher than other shows.

Staff Demand- Based on information provided by SLA, an attendance of 485 people will require 10 staff members. Assuming each staff member commutes in their own vehicle results in a need for 10 staff parking spaces.

*Parking Observations*

A parking study was conducted by Gorrill-Palmer Consulting Engineers, Inc. on October 25<sup>th</sup>, the same night as the first survey was distributed to attendees. Two counts were conducted, the first was done before the show (5:45 p.m. to 7:00 p.m.) and the second was completed during the show (7:40 p.m. to 9:10 p.m.). Parked vehicles were counted on all surrounding streets within a half-mile radius of SLA. However, vehicles parked in the vicinity of SLA were the main focus. A walking radius was measured from a one minute walk to the St Lawrence Arts Center up to a four minute walk, assuming the average person walks 3 feet per second (180 feet per minute).

The increase in parked vehicles during the show is provided below:

LENGTH OF WALK	WALKING RADIUS	# OF VEHICLES BEFORE SHOW	# OF VEHICLES DURING SHOW	DIFFERENCE (+/-)
1 minute	180 feet	36	45	+ 9
2 minutes	360 feet	129	147	+ 18
3 minutes	540 feet	293	336	+ 43
4 minutes	720 feet	415	490	+ 75
5 minutes	900 feet	544	664	+ 120

Although we might find these results informative and useful, we can't assume the entire difference of vehicles is representing SLA. The Front Room is a local restaurant and bar located across the street from

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SLA, a popular spot on a Friday evening. Venues, like The Front Room, located near SLA can also influence the demand. Based on these considerations, the 56 vehicles based on the survey appear reasonable.

### *Comparing Estimates*

The parking rate of 0.40 based on ITE coincides with the 0.40 ratio determined from the December show but is less than the 0.54 determined from the October show. However, as previously mentioned, the October show attracted an older crowd and therefore the number of people traveling by car may have been higher than other shows. In addition, as a general principal, parking ratio can be expected to decline as the number of seats increases.

### **Recommendation for Number of Spaces**

After consideration of these variations, our office estimates a demand of 218 spaces (0.45 vehicles per attendee) for the site. This recommendation is more than forecast by ITE for a live theater and observed during the December show but less than the 0.54 ratio derived from October show which attracted an older crowd. We recommend an additional 10 spaces be available for employees. Furthermore, employees of SLA will have a designated parking area on the street at a distance of at least 300 feet from the building. Nelson Nygaard's review of the parking demand for a 401-seat Performance Hall in the Munjoy Hill neighborhood estimates that SLA will need to provide 122 parking spaces. Our parking analysis cited a need for 218 parking spaces, which is based on occupancy of 485 people among the three different spaces (Parish Hall Theater, Performance Hall, and the Promenade Room) for one event. It should be noted the typical maximum audience will not exceed 401 people, and many times much less. However, it is the opinion of GP based on these analyses and discussions with SLA that Nelson Nygaard's figure is well below what will be needed. It is our opinion that 218 spaces is more realistic as it is based on statistically significant surveys conducted during sold-out performances of the current 110-seat Parish Hall Theater (10/25/2013 and 12/13/13) operated by SLA. Furthermore, an independent survey of needed parking spaces for the venue conducted by members of the Concerned Citizens of Munjoy Hill (CCMH) complemented the recommended 218 spaces and therefore, we have proceeded drafting the plan based on a need of 218 spaces.

### **Parking Supply**

A count was also done of the total number of occupied parking spaces on each street within a 900 foot radius of the SLA on Tuesday evening, December 10th beginning at midnight. The purpose of the counts was to estimate the number of spaces used by the area residences and most of the parking that late at night should be associated with residences. The results of these parking observations are provided as follows.

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<i>Length of Walk</i>	<i>Walking Radius</i>	<i># of Spaces</i>	<i># Occupied 12:00 midnight Tuesday</i>	<i>Available Spaces</i>
1 minute	180 feet	42	30	<b>12</b>
2 minutes	360 feet	144	107	<b>37</b>
3 minutes	540 feet	345	273	<b>72</b>
4 minutes	720 feet	551	436	<b>115</b>
5 minutes	900 feet	838	659	<b>179</b>

The Cutter Street parking lots located on the Eastern Promenade were vacant during our surveys and have a capacity of 95 vehicles. Results of the Cutter Street parking lots are provided on the following page.

<i>Parking Area</i>	<i># of Available Spaces</i>
Lower Parking Lot	24
Middle Parking Lot	35
Upper Parking Lot	15
On-Street Parking	21
<b>Total:</b>	<b>95</b>

Combining the results of the available on-street parking and Cutter Street lot parking, a total of 274 spaces are available to attendees.

### **Parking Demand and Supply**

As discussed in the “Recommendations for Number of Spaces” section, SLA will typically incur a parking demand of approximately 218 vehicles plus 10 employees during show events. Though these spaces have been identified, SLA plans to encourage patrons to park downtown and travel by public transportation to the facility.

The available parking in the vicinity of the site is as follows:

- 179 on-street automobile parking spaces
- 95 Cutter Street automobile parking spaces

This will provide 274 automobile parking spaces for attendees of each show. The 179 on-street parking spaces are based on a 5 minute walk radius around SLA.

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## **Transportation Demand Management (TDM)**

### **Purpose of Plan**

The City of Portland requires the creation of a Transportation Demand Management Plan for all projects in excess of 50,000 square feet, or with 100 or more employees or students. SLA meets these requirements. However, in the case of this project, the TDM Plan serves a series of important needs:

- Make maximum use of nearby existing transit infrastructure
- Reduce peak hour trip impacts to adjacent roadway infrastructure
- Reduce the amount of needed parking on-site, especially as land is limited
- Encourage healthy activities

It is important to note that this Plan should not be viewed as a series of fixed, or unchanging recommendations. It is a living document intended to be reviewed and updated on a regular basis as SLA works with changes in local transportation patterns, preferences, and prices. Ultimately, the goal will be to make significant reductions in peak hour single-occupancy vehicle (SOV) activity on the local street networks as well as the need for on-site parking.

### **TDM Coordinator**

SLA has designated its Executive Director as the TDM Coordinator, charged with coordinating the TDM plan. The TDM coordinator will be responsible for the following:

- Coordinating and promoting rideshare opportunities
- Coordinating with and promoting Metro
- Monitoring parking usage
- Overseeing event scheduling
- Encouraging the greater use of bicycling, walking, and bus-based transit
- Overseeing ongoing monitoring and updating of the plan
- Filing annual reports with the City

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## Single Occupancy Reduction Strategies

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### *METRO Subsidies*

SLA is located on Munjoy Hill in Portland on Congress Street. Its location is nearby the following transit services:

- *Metro Route #1, Congress Street:* Portland METRO provides twice an hour service to Munjoy Hill with other major stops including Monument Square and the State Theatre. It also allows access to the Greyhound Bus Station and the Elm Street METRO facility. A limited service combining Routes 1 and 5 is provided on Sundays.
- *Primary User:* Patrons of SLA and Community Members
- *Responsibility:* SLA, METRO

SLA is proposing that the core of its TDM be a partnership with Metro to both extend and enhance the service of the Art Line that travels up and down Congress Street. At present the Art Line runs on a thirty-minute frequency between 7:00 a.m. and 8:00 p.m. with less frequency between 8:00 p.m. and 10:00 p.m. Based on our conversations with SLA, they are mindful of the discussion taking place at the City of Portland on changes to the downtown's Tax Increment Finance (TIF) policy and that peninsula transit improvements are a potential use of this revenue. SLA recognizes that its proposed partnership with Metro and the revenue SLA proposes to bring to the table could be joined with TIF revenue to support a broader and more consequential transit improvement, one that could lead to 15 minute frequency on the Art Line all day and evening. The implications of this plan would not only serve the patrons of SLA, but would also allow residents the opportunity to take advantage of more frequent evening transit service on the peninsula.

With enhanced Metro service, patrons of SLA would be encouraged to utilize downtown parking lots, garages and street parking and use the Art Line to travel up to SLA. The Temple Street and Free Street garages are open until 10:00 p.m. Monday – Saturday and it is our understanding that both have plenty of available parking after 5:00 p.m. Both garages are within one block of stops along the Art Line. The number of parking spaces that these parking facilities provide should exceed the 219 spaces we recommend. Patrons of SLA would have their parking ticket validated for up to three-hours of free parking. It is our understanding that SLA will subsidize and encourage use of this remote parking.

SLA has met with representatives from Metro and it is our understanding that both organizations are highly enthusiastic about a partnership. The Nelson Nygaard review encourages SLA to create a “more specific and targeted PTDM” and part of doing so will be understanding what motivates patrons of SLA to drive and park close to SLA. For this approach to work, SLA and Metro will need to effectively communicate and market the transit option as convenient, affordable, easy, and fun. In particular, the

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marketing effort should promote transit as a key piece of a fun night out that includes both dining and entertainment. In addition to the higher frequency service on the Art Line proposed by this plan, Metro will be rolling out real-time bus arrival information in 2015. This technology will allow riders to get actual bus arrival information through smart phones, text, website and, in some places, message boards at bus shelters.

A financial investment by SLA to the Metro will enhance these kinds of conveniences to Portland's public transportation system. Another key of this partnership is making parking downtown and travelling to and from SLA easy by suggesting patrons park in a specific place (lot or garage) and wait for the Art Line bus at a specific spot to ride up Munjoy Hill to SLA. It is our understanding that SLA and Metro agree that a carefully laid out marketing plan is essential to the success of the TDM as well as making the parking and bus ride part of a ticket surcharge so that patrons do not incur extra charges along the way. Based on discussions with SLA, they have included in their financial projections that each patron will pay a ticket surcharge. Patrons then will show their ticket (paper or smart phone) to the bus driver to receive a ride to SLA.

The cost for Metro to shorten its arrival frequency from 30 minutes to 20 minutes Monday – Saturday and extend this service to 11:00 p.m. is estimated by Metro at \$70,000 annually. Based on our discussions with SLA, this funding will be provided by SLA through its ticket surcharge. Also, by virtue of growing ridership and diversifying the transit system's revenue base, the partnership can make Metro more competitive in obtaining new federal grant funds that can support further transit expansion. In this manner, this partnership is truly strategic in that it can help achieve positive transportation outcomes for the broader community in addition to the specific goal of getting SLA patrons from point A to point B.

#### *Valet Parking*

➤ Primary User: Patrons

Gorrill-Palmer agrees with Nelson Nygaard's finding that a superior front-door valet service should be available to patrons who want to arrive at the Performance Hall with their car. SLA is proposing to work with Unified Parking Partners, a full service parking Management Company based in Portland, Maine and servicing all of New England. Their focus is garage, flat lot, healthcare, hotel and restaurant, and event parking management. This service will be available to patrons who wish to pay for exceptionally convenient parking on top of tickets to a concert. Patrons utilizing this service would be charged a minimal fee to cover the cost above the (parking) ticket surcharge as well as giving a tip. Every ticket buyer will pay either at the point of sale or at the door. The cost to bring valet service to SLA for events is \$25/\$30 an hour, which includes an environmentally safe and friendly vehicle shuttle for the valet parking staff. Unified Parking Partners manages several parking lots in Portland and their owner would also utilize the Cutter Street and its two parking lots (95 spaces).

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### *Bicycle Transportation*

Portland is an extremely friendly pedestrian and biking city. SLA will encourage patrons who live within a walking and biking distance to access these TDM friendly modes of transportation. SLA will provide 10 bike racks outside the facility (20 spaces) encouraging patrons and staff members to bike to the Performance Hall. SLA will become a participating business in Bicycle Benefits ([www.bicyclebenefits.org](http://www.bicyclebenefits.org)), a national program that offers incentives and rewards for patrons who show up to an establishment on a bicycle. Portland, Maine businesses already have strong membership in Bicycle Benefits.

- Primary User: Patrons
- Responsibility: SLA

SLA will also work with the City of Portland's Pedestrian-Bicycle Committee as well as The Bicycle Coalition of Maine, an organization that formed in 1992 to make Maine better for bicycling and promote bicycling in Maine.

### *Pedestrian Accommodations*

Pedestrian connections currently surround the SLA building. Congress Street provides sidewalks on both sides of the street for pedestrians walking from in-town Portland. A majority of side streets provide sidewalks for guests who are walking from local neighborhoods. Crosswalks are also provided to nearby streets including Beckett Street, Munjoy Street, and Howard Street as well as on the Eastern Promenade at Moody and Wilson Streets.

- Primary User: Patrons
- Responsibility: City of Portland

### *Education for Patrons*

As discussed, the SLA will provide route maps, schedules, and ticket information via the website with ticket reservations. Information about the METRO Route 1 and downtown parking will be provided. There will also be announcements before and after the show regarding the bus schedule, including real-time arrivals available in the lobby. It is important that this information also be provided on SLA's website along with a link to the METRO Route 1 webpage. A direct link to the parking information should be at the top of SLA's website, next to "Directions." This link should provide exact directions to parking and bus incentives encouraging attendees to carpool or use the transit system.

- Primary User: Patrons
- Responsibility: SLA



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### *Free Market Options*

Transportation by Cabs and Pedicabs (bicycle cabs), will also be a viable option to patrons of SLA who live in Portland, or patrons who have parked downtown and elect to not use public transportation.

### *Carpooling*

Some patrons will still travel by automobile up to Munjoy Hill and SLA will promote car sharing as an option to reduce the number of cars that travel to the facility for an event. SLA will provide information on its website for Go Maine, which is Maine's statewide commuter service providing access to low-cost, healthy, economical and eco-friendly options for commuting. SLA will promote ride share, a multi-modal, one-time ride share opportunity.

## MARKETING

A carefully thought-out marketing plan that provides easily accessible information is the key to implementing a successful TDM for SLA. SLA will create a marketing strategy that complements and works closely with the other area Portland organizations that promote walking, bicycling, and public transit as alternative modes of transportation. SLA will also implement "honor system" strategies such as a button at the end of the online ticket system to check if you are carpooling or travelling by bus/foot/bike with an associated discount. An outline of the marketing plan is presented below:

- SLA will have a "Where to Park" tab clearly posted on its website that outlines instructions on utilizing the Metro system, including what downtown garage to park in and where to wait for the Art Line bus. Instructions on how to use public transportation, walk, and bike will be provided at the top of the page emphasizing it over travelling by automobile.
- SLA will have a travel information kiosk in its lobby
- All ticket holders will receive instructions on parking at the time of purchase.
- SLA's website will include a map of the neighborhood encouraging patrons NOT park within 300 feet of SLA citing the negative impact such congestion will have on residents and neighboring businesses.
- SLA's website will have easy to understand information (and links to Portland Trails and Metro) on how to bike or use transit to get to the Performance Hall. SLA will provide a link to Google Transit walk trip planner.
- SLA will try to establish its Performance Hall as a Green Certified event space, acknowledging that the biggest carbon element to an event is how people travel to and from the property (i.e. encourage people to leave cars behind).

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- SLA will work with Metro to create a catchy and green marketing campaign to target its audience. The marketing campaign will need to be developed, but will generally focus on the following key messages: Using the Art Line to get to SLA is easy, free, fast, green and connects dining and entertainment.

## **Monitoring**

### *Parking Counts*

As part of its TDM Plan monitoring program, SLA will assess the use of its various operational components, starting one month after the opening of the expansion and annually thereafter. As the most critical component of the TDM program will be to reduce parking demand, the first part of each monitoring effort will include a parking count of the surrounding streets before and during an event. This count will include the Cutter Street parking lots on the Eastern Promenade.

### *Surveys - Employees*

One month after the expansion of the facility, SLA employees will be surveyed regarding their transportation choices such as automobile/bicycle ownership, parking demand, and the frequency of trips using bicycle, walking carpool/vanpool, and the bus. The survey will be developed in consultation with the City's TDM manager and conform to overall City TDM modeling planning.

The surveys will be conducted to determine:

- Mode of travel to and from work (car/carpool/biking/walking/bus)
- Preferences or concerns with mode of travel
- An important component of the survey will be to determine the flexibility of employees to utilizing various travel modes to access the facility

### *Surveys - Attendees*

For attendees to SLA, surveys will be either conducted as patrons enter the site in the form of one or two questions from a volunteer, or patrons will be given a survey they can complete and return in exchange for a free gift.

The surveys will be conducted to determine:

- Mode of travel to and from the show (car/carpool/walking/bus)
- Preferences or concerns with model of travel
- Specify as a driver or a passenger

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*Submission of Monitoring Information/Updated TDM Plan*

Based upon the results of the monitoring, SLA will update the TDM Plan and submit a draft plan to the City's TDM Manager for review and comments. The primary goal of the initial year will be to reduce the parking demand five percent from the calculated demand.

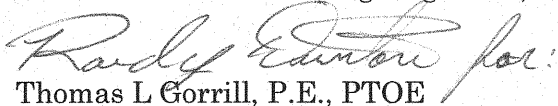
**Closure**

The TDM plan and SLA's investment in Greater Portland Metro will be a tremendous benefit to the community at large as well as SLA patrons, emphasizing less reliance on automobile traffic, utilization of downtown structures, and investment in an important public infrastructure.

Please contact us with any questions.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

  
Thomas L Gorrill, P.E., PTOE  
Principal