



Appendix 2.6-3

Metzger Memorandum



PB Team

NYCT – Number 7 Extension Project
2 Broadway -5th Floor, Mailbox 519
New York, NY 10004
Fax: 646-252-2063

FINAL

MEMORANDUM

TO: G. Price, NYC Department of City Planning
M. Amjadi, NYC Department of City Planning

FROM: E. Metzger

DATE: September 28, 2004

RE: CM-1189R/C-26501– Preparation of a Draft and Final Environmental Impact Statement and Provision of Transit Engineering Services for the Proposed No. 7 Subway Extension-Far West Midtown Manhattan Rezoning

SUBJECT: Convention Center Expansion Transportation Planning Assumptions

CIN: MTA-NYC Transit/CM 1189R-C26501-00-C-1.00-DCP-03F-1622

This technical memorandum provides a summary of the transportation planning assumptions proposed to be utilized for the development of Jacob K. Javits Convention Center (Convention Center) Expansion trip generation rates for the traffic, parking, transit, and pedestrian analyses of the DGEIS. The proposed expansion would approximately double the amount of existing exhibition space, increase the number of existing meeting rooms, and add new components such as a plenary hall with fixed seating. The northward expansion of the Convention Center would also provide for an additional entrance on West 42nd Street (accessed via the proposed Convention Center hotel).

Existing Attendance Patterns

The Convention Center currently hosts a wide range of events including trade shows, conventions with exhibits, consumer (public) shows, special events, meetings, and seminars. Daily attendances at these events range from upwards of 95,000 attendees for large public shows to small seminars with attendances of less than 100. Table 1 provides a listing of all events held at the Convention Center in 1999¹, ranked in order of their total daily visitation (attendees plus exhibitors.)

As shown in Table 1, public shows tend to draw the largest daily attendances; the top four attendance dates in 1999 were all weekend days associated with the New York International Auto Show (attendance on these four dates ranged from 68,202 to 95,707). The Auto Show, which is historically the largest attended show at the Convention Center, attracted approximately 525,000 visitors during a nine-day period in 1999. Other large public shows at the Convention Center in 1999 included the New York National Boat Show and the PC Expo. With the exception of these large public shows, attendance patterns at the Convention Center are dominated by combinations of trade shows (held on both weekdays and weekends) when more than one event is scheduled simultaneously. These events drew daily attendances of

¹ Annual attendance from 1999 was assumed to be a "typical" year for analysis purposes, based upon input from Convention Center management and a review of attendance patterns from 1997-2000. Attendance data after 2000 was not considered due to the events of September 11, 2001. To provide for a more conservative analysis, 1999 attendance data will be subsequently increased to account for modest growth experienced in Convention Center attendance between 1999 and 2000 (an overall increase of 6.2%); this change is reflected in Table 5.

Table 1: Ranked Daily Attendance of 1999 Convention Center Events (Annual)

Rank	Estimated Attendance	Date	Day of Week	Show Type	Primary Event(s)			
#1	95,707	4/10/99	Saturday	Public	Int'l Auto Show			
#2	86,483	4/3/99	Saturday	Public	Int'l Auto Show			
#3	81,056	4/11/99	Sunday	Public	Int'l Auto Show			
#4	68,202	4/4/99	Sunday	Public	Int'l Auto Show			
#5	67,516	1/9/99	Saturday	Public	Boat Show	Fashion Boutique	Style Industrie	
#6	62,126	6/23/99	Wednesday	Public	PC Expo			
#7	60,047	6/22/99	Tuesday	Public	PC Expo			
#8	59,958	10/28/99	Thursday	Trade	Interplan/Design	Photo East Expo '99		
#9	56,724	1/31/99	Sunday	Trade	Int'l Gift Fair			
#10	52,692	10/29/99	Friday	Trade	Interplan/Design	Photo East Expo '99		
#11	51,004	4/9/99	Friday	Public	Int'l Auto Show			
#12	46,989	2/1/99	Monday	Trade	Int'l Gift Fair			
#13	43,369	8/15/99	Sunday	Trade	Int'l Gift Fair			
#14	42,985	1/10/99	Sunday	Public	Boat Show	Fashion Boutique	Style Industrie	Fashion Accessories
#15	41,075	4/8/99	Thursday	Public	Int'l Auto Show			
#16	40,577	8/16/99	Monday	Trade	Int'l Gift Fair			
#17	40,254	4/7/99	Wednesday	Public	Int'l Auto Show			
#18	39,220	2/2/99	Tuesday	Trade	Int'l Gift Fair			
#19	36,903	7/21/99	Wednesday	Public	Law Enforcement	MacWorld		
#20	36,821	1/2/99	Saturday	Public	Boat Show			
#21	36,720	8/1/99	Sunday	Trade	Style Industrie	Fashion Boutique	Fashion Acc. Expo.	JA Jewelry
#22	35,486	5/16/99	Sunday	Trade	Contemp Furniture	Italian Style	Surtex	Nat'l Stationery
#23	35,327	6/24/99	Thursday	Public	PC Expo			
#24	35,058	4/6/99	Tuesday	Public	Int'l Auto Show			
#25	32,600	5/17/99	Monday	Trade	Contemp Furniture	Italian Style	Surtex	Nat'l Stationery
#26	32,371	4/5/99	Monday	Public	Int'l Auto Show			
#27	31,701	8/17/99	Tuesday	Trade	Int'l Gift Fair			
#28	31,651	8/2/99	Monday	Trade	Style Industrie	Fashion Boutique	Fashion Acc. Expo.	JA Jewelry
#29	31,023	10/6/99	Wednesday	Public	Fall Internet World			
#30	29,767	9/25/99	Saturday	Trade	Audio Engineering	Nat'l Merchandise	Style Industrie	
#31	29,009	9/26/99	Sunday	Trade	Audio Engineering	Nat'l Merchandise	Style Industrie	
#32	28,927	7/22/99	Thursday	Public	Law Enforcement	MacWorld		
#33	28,885	10/7/99	Thursday	Public	Fall Internet World			
#34	28,884	5/25/99	Tuesday	Trade	Fashion Boutique	Medical D & M	Finance Bus. Tech.	
#35	28,582	11/17/99	Wednesday	Trade	Chemical Expo	Financial Tech Expo	In-Cosmetic USA	
#36	28,346	11/6/99	Saturday	Trade	Hotel/Motel/Rest.			
#37	27,782	5/26/99	Wednesday	Trade	Fashion Boutique	Medical D & M	Finance Bus. Tech.	
#38	27,716	11/8/99	Monday	Trade	Hotel/Motel/Rest.		Culinary Inst.	
#39	26,939	10/30/99	Saturday	Trade	Photo East Expo '99	NYS Teachers Exam		
#40	26,552	2/3/99	Wednesday	Trade	Int'l Gift Fair			
#41	26,550	11/16/99	Tuesday	Trade	Chemical Expo	Financial Tech Expo	In-Cosmetic USA	
#42	26,163	11/7/99	Sunday	Trade	Hotel/Motel/Rest.			
#43	26,141	3/7/99	Sunday	Trade	Art Expo	Int'l Beauty Show		
#44	23,190	1/11/99	Monday	Trade	Fashion Boutique	Style Industrie	Fashion Accessories	
#45	23,174	2/13/99	Saturday	Trade	Int'l Toy Fair	Variety Merchandise		
#46	22,905	5/4/99	Tuesday	Trade	Fashion Access.	On Demand Digital	Premium Incentive	
#47	22,594	9/24/99	Friday	Trade	Audio Engineering	Nat'l Merchandise	Retail Seek	
#48	22,439	5/18/99	Tuesday	Trade	Contemp Furniture	Italian Style	Surtex	Nat'l Stationery
#49	22,381	1/24/99	Sunday	Trade	Kids Fashion	JA Jewelry		
#50	22,286	8/18/99	Wednesday	Trade	Int'l Gift Fair			
#51	21,703	8/3/99	Tuesday	Trade	Style Industrie	Fashion Boutique	Fashion Acc. Expo.	JA Jewelry
#52	21,499	9/15/99	Wednesday	Trade	Comp. Telephony	POP Show		
#53	21,145	4/20/99	Tuesday	Trade	Vibe Style	Interphex		
#54	20,818	4/27/99	Tuesday	Trade	Buildings NY	Fashion Fabric	Int'net & Elec Comm	
#55	20,687	6/8/99	Tuesday	Trade	Licensing '99	HBA Global Expo		
#56	20,390	8/24/99	Tuesday	Trade	Telecom Business			
#57	20,314	3/20/99	Saturday	Trade	Int'l Vision Expo	Fashion Boutique		
#58	20,268	10/19/99	Tuesday	Trade	Fashion Boutique	Vibe Style	Kids Fashion	Off-price Spec.
#59	19,932	6/9/99	Wednesday	Trade	Licensing '99	HBA Global Expo		
#60	19,764	3/19/99	Friday	Trade	Int'l Vision Expo			
#61	19,662	11/28/99	Sunday	Trade	Greater NY Dental			
#62	19,121	11/18/99	Thursday	Trade	Chemical Expo	Financial Tech Expo	In-Cosmetic USA	Postage Stamps
#63	18,880	10/27/99	Wednesday	Trade	Interplan/Design			
#64	18,653	4/21/99	Wednesday	Trade	Interphex	Int'l Bus. Expo		
#65	18,562	2/14/99	Sunday	Trade	Int'l Toy Fair	Variety Merchandise		
#66	18,550	4/28/99	Wednesday	Trade	Buildings NY	Fashion Fabric	Int'net & Elec Comm	
#67	18,427	1/25/99	Monday	Trade	Kids Fashion	JA Jewelry		
#68	18,088	10/17/99	Sunday	Trade	Fashion Boutique	Vibe Style	Kids Fashion	
#69	18,074	1/3/99	Sunday	Public	Boat Show	Church of Christ		
#70	17,902	2/12/99	Friday	Trade	Int'l Toy Fair			
#71	17,439	2/23/99	Tuesday	Trade	NY Rest. & Food	I.T. for Wall Street	NYS Law Exam	
#72	17,348	5/5/99	Wednesday	Trade	On Demand Digital	Premium Incentive		
#73	17,088	10/8/99	Friday	Public	Fall Internet World			
#74	17,068	7/11/99	Sunday	Trade	Fancy Food			
#75	17,037	10/18/99	Monday	Trade	Fashion Boutique	Vibe Style	Kids Fashion	Off-price Spec.

Table 1: Ranked Daily Attendance of 1999 Convention Center Events (Annual)

Rank	Estimated Attendance	Date	Day of Week	Show Type	Primary Event(s)		
#76	16,892	5/24/99	Monday	Trade	Fashion Boutique		
#77	16,563	7/12/99	Monday	Trade	Fancy Food		
#78	16,556	12/18/99	Saturday	Trade	Kwanzaa Holiday		
#79	16,149	7/23/99	Friday	Trade	MacWorld		
#80	15,904	5/23/99	Sunday	Trade	Fashion Boutique		
#81	15,474	3/8/99	Monday	Trade	Art Expo	Int'l Beauty Show	
#82	15,187	11/29/99	Monday	Trade	Greater NY Dental		
#83	14,818	9/27/99	Monday	Trade	Audio Engineering	Nat'l Merchandise	Style Industrie
#84	14,766	1/16/99	Saturday	Public	Int'l Motorcycle	NYS Teachers Exam	
#85	14,759	11/30/99	Tuesday	Trade	Greater NY Dental		
#86	14,616	3/21/99	Sunday	Trade	Int'l Vision Expo	Fashion Boutique	
#87	14,470	2/20/99	Saturday	Trade	Style Industrie	Church of Christ	
#88	14,294	2/22/99	Monday	Trade	Style Industrie	NY Rest. & Food	I.T. for Wall Street
#89	14,038	12/1/99	Wednesday	Trade	Greater NY Dental		
#90	13,981	2/21/99	Sunday	Trade	Style Industrie	NY Rest. & Food	
#91	13,959	9/1/99	Wednesday	Trade	Data Warehousing	Int'l Security Conf.	
#92	13,831	1/8/99	Friday	Public	Boat Show		
#93	13,564	12/19/99	Sunday	Trade	Kwanzaa Holiday	Church of Christ	
#94	13,291	9/14/99	Tuesday	Trade	Comp. Telephony		
#95	13,258	2/24/99	Wednesday	Trade	I.T. for Wall Street	NYS Law Exam	
#96	12,517	7/3/99	Saturday	Trade	Style Industrie	Fashion Boutique	
#97	12,404	7/13/99	Tuesday	Trade	Fancy Food		
#98	12,204	9/16/99	Thursday	Trade	Comp. Telephony	POP Show	Show Biz Expo
#99	12,096	1/26/99	Tuesday	Trade	Kids Fashion	JA Jewelry	
#100	11,516	3/9/99	Tuesday	Trade	Int'l Beauty Show		
#101	11,216	1/12/99	Tuesday	Trade	Fashion Boutique	Fashion Accessories	
#102	10,967	6/10/99	Thursday	Trade	Licensing '99	HBA Global Expo	
#103	10,898	2/15/99	Monday	Trade	Int'l Toy Fair	Variety Merchandise	
#104	10,772	10/20/99	Wednesday	Trade	Kids Fashion	Off-price Spec.	Int'l Fashion Fabric
#105	10,700	11/9/99	Tuesday	Trade	Hotel/Motel/Rest.		
#106	10,658	4/18/99	Sunday	Trade	Erotica	Gay & Lesbian Bus.	Vibe Style
#107	10,446	8/31/99	Tuesday	Trade	Data Warehousing	Int'l Security Conf.	
#108	10,369	5/3/99	Monday	Trade	Style Industrie	Fashion Access.	On Demand Digital
#109	10,176	4/22/99	Thursday	Trade	Interphex		
#110	9,873	1/17/99	Sunday	Public	Int'l Motorcycle		
#111	9,811	1/30/99	Saturday	Trade	Int'l Gift Fair		
#112	9,704	5/6/99	Thursday	Trade	On Demand Digital	Premium Incentive	
#113	9,695	1/7/99	Thursday	Public	Boat Show		
#114	9,600	3/6/99	Saturday	Trade	Art Expo	Int'l Beauty Show	
#115	9,575	1/6/99	Wednesday	Public	Boat Show		
#116	9,557	1/19/99	Tuesday	Trade	Retail Federation	Magic East	
#117	9,512	8/14/99	Saturday	Trade	Int'l Gift Fair		
#118	9,389	12/14/99	Tuesday	Trade	E-Business Expo	Bazaar & Earthweb	
#119	9,365	5/15/99	Saturday	Trade	Contemp Furniture	Italian Style	
#120	9,321	1/18/99	Monday	Trade	Retail Federation		
#121	9,284	8/4/99	Wednesday	Trade	JA Jewelry		
#122	8,972	5/27/99	Thursday	Trade	Medical D & M	Finance Bus. Tech.	
#123	8,686	4/17/99	Saturday	Trade	Erotica	Gay & Lesbian Bus.	Teachers Exam
#124	8,651	1/5/99	Tuesday	Public	Boat Show		
#125	8,478	8/23/99	Monday	Trade	Telecom Business		
#126	8,468	5/19/99	Wednesday	Trade	Nat'l Stationery		
#127	8,130	5/2/99	Sunday	Trade	Style Industrie	Fashion Access.	
#128	7,961	12/15/99	Wednesday	Trade	E-Business Expo	Bazaar & Earthweb	
#129	7,804	8/25/99	Wednesday	Trade	Telecom Business		
#130	7,735	9/2/99	Thursday	Trade	Data Warehousing	Int'l Security Conf.	
#131	7,510	6/17/99	Thursday	Trade	TCI Commencement		
#132	7,052	8/9/99	Monday	Trade	Kids Fashion	Music Expo	
#133	7,051	2/4/99	Thursday	Trade	Int'l Gift Fair		
#134	7,015	1/4/99	Monday	Public	Boat Show		
#135	6,728	3/5/99	Friday	Trade	Art Expo		
#136	6,716	10/5/99	Tuesday	Public	Fall Internet World		
#137	6,466	7/14/99	Wednesday	Trade	Fancy Food		
#138	6,354	3/4/99	Thursday	Trade	Art Expo		
#139	6,324	4/29/99	Thursday	Trade	Fashion Fabric	Int'net & Elec Comm	
#140	6,300	2/25/99	Thursday	Trade	I.T. for Wall Street		
#141	5,824	3/14/99	Sunday	Trade	Int'l Kids Fashion		
#142	5,759	10/4/99	Monday	Trade	NY Fall Textile	Fall Internet World	
#143	5,525	3/15/99	Monday	Trade	Int'l Kids Fashion	Vinisud USA	
#144	5,510	6/27/99	Sunday	Trade	Church of Christ	Local 638 Vote	
#145	5,499	4/19/99	Monday	Trade	Vibe Style		
#146	5,353	8/19/99	Thursday	Trade	Int'l Gift Fair		
#147	5,218	8/8/99	Sunday	Trade	Kids Fashion		
#148	5,205	6/28/99	Monday	Trade	Chairman's Address		
#149	5,205	7/20/99	Tuesday	Trade	Merchandise	Law Enforcement	
#150	5,185	1/15/99	Friday	Public	Int'l Motorcycle		

Table 1: Ranked Daily Attendance of 1999 Convention Center Events (Annual)

Rank	Estimated Attendance	Date	Day of Week	Show Type	Primary Event(s)		
#151	5,056	4/30/99	Friday	Trade	CUNY Job Fair		
#152	5,025	12/16/99	Thursday	Trade	E-Business Expo	Bazaar & Earthweb	
#153	4,878	8/10/99	Tuesday	Trade	Kids Fashion	Music Expo	
#154	4,745	6/5/99	Saturday	Trade	Agriflor	Financial Analyst	
#155	4,742	4/16/99	Friday	Trade	Erotica		
#156	4,477	3/16/99	Tuesday	Trade	Int'l Kids Fashion	Vinisud USA	
#157	4,410	6/3/99	Thursday	Trade	China Trade	Living Better Expo	Agriflor
#158	4,313	10/3/99	Sunday	Trade	NY Fall Textile		
#159	4,202	10/16/99	Saturday	Trade	Fashion Boutique		
#160	4,154	12/8/99	Wednesday	Trade	Java Business	Criminal Justice	
#161	4,135	10/21/99	Thursday	Trade	Int'l Fashion Fabric		
#162	4,009	1/20/99	Wednesday	Trade	Retail Federation	Magic East	
#163	3,768	10/2/99	Saturday	Trade	NY Fall Textile		
#164	3,733	5/1/99	Saturday	Trade	Style Industrie		
#165	3,555	12/7/99	Tuesday	Trade	Java Business		
#166	3,519	9/18/99	Saturday	Trade	Show Biz Expo	Franchise Expo	
#167	3,492	2/11/99	Thursday	Trade	Int'l Toy Fair		
#168	3,432	6/4/99	Friday	Trade	Agriflor		
#169	3,290	9/17/99	Friday	Trade	Show Biz Expo	Franchise Expo	
#170	3,255	5/30/99	Sunday	Trade	Church of Christ		
#171	3,205	6/30/99	Wednesday	Trade	Bar Review		
#172	3,147	7/27/99	Tuesday	Trade	NYS Bar Exam		
#173	3,147	7/28/99	Wednesday	Trade	NYS Bar Exam		
#174	3,094	11/27/99	Saturday	Trade	Greater NY Dental		
#175	3,030	4/15/99	Thursday	Trade	Erotica		
#176	3,005	2/28/99	Sunday	Trade	Church of Christ		
#177	3,005	5/9/99	Sunday	Trade	Church of Christ		
#178	3,005	6/6/99	Sunday	Trade	Church of Christ		
#179	3,005	8/6/99	Friday	Trade	US Immig & Nat.		
#180	3,005	8/26/99	Thursday	Trade	US Immig & Nat.		
#181	3,005	11/12/99	Friday	Trade	Sylvia Browne		
#182	3,005	11/14/99	Sunday	Trade	Church of Christ		
#183	3,005	12/5/99	Sunday	Trade	Penny Harvest		
#184	2,470	7/18/99	Sunday	Trade	Merchandise		
#185	2,304	12/9/99	Thursday	Trade	Java Business	Criminal Justice	
#186	2,259	3/18/99	Thursday	Trade	Int'l Kids Fashion		
#187	2,222	10/1/99	Friday	Trade	NY Fall Textile		
#188	2,208	3/22/99	Monday	Trade	Fashion Boutique		
#189	2,094	4/26/99	Monday	Trade	Buildings NY		
#190	2,005	7/9/99	Friday	Trade	Local 638 Vote		
#191	2,005	8/5/99	Thursday	Trade	Gibbs Graduation		
#192	2,000	9/23/99	Thursday	Trade	Retail Seek		
#193	1,961	3/17/99	Wednesday	Trade	Int'l Kids Fashion		
#194	1,943	1/21/99	Thursday	Trade	Magic East		
#195	1,875	7/19/99	Monday	Trade	Merchandise		
#196	1,835	8/30/99	Monday	Trade	Data Warehousing		
#197	1,805	9/8/99	Wednesday	Trade	Sun Microsystems		
#198	1,769	2/16/99	Tuesday	Trade	Variety Merchandise		
#199	1,546	3/23/99	Tuesday	Trade	Fashion Boutique	Sero Scholarship	
#200	1,535	1/22/99	Friday	Trade	Magic East		
#201	1,505	3/25/99	Thursday	Trade	Mercedes Benz		
#202	1,475	9/9/99	Thursday	Trade	Sun Microsystems		
#203	1,405	9/20/99	Monday	Trade	Yom Kipper Services		
#204	1,385	3/12/99	Friday	Trade	Limo Transpo		
#205	1,360	11/20/99	Saturday	Trade	Postage Stamps		
#206	1,272	3/13/99	Saturday	Trade	Limo Transpo		
#207	1,078	11/19/99	Friday	Trade	Postage Stamps		
#208	1,005	4/25/99	Sunday	Trade	Childrens Museum		
#209	855	7/17/99	Saturday	Trade	NYS Teachers Exam		
#210	825	11/21/99	Sunday	Trade	Postage Stamps		
#211	788	6/2/99	Wednesday	Trade	China Trade	Living Better Expo	
#212	600	11/1/99	Monday	Trade	MCS East Meeting		
#213	505	6/1/99	Tuesday	Trade	China Trade		
#214	505	9/29/99	Wednesday	Trade	KW Training		
#215	505	12/3/99	Friday	Trade	Banker's Trust Party		
#216	495	11/2/99	Tuesday	Trade	MCS East Meeting		
#217	487	12/6/99	Monday	Trade	Java Business		
#218	405	3/24/99	Wednesday	Trade	Aging Brain		
#219	405	7/7/99	Wednesday	Trade	KW Training		
#220	380	11/23/99	Tuesday	Trade	America Sings		
#221	380	11/24/99	Wednesday	Trade	America Sings		
#222	333	9/19/99	Sunday	Trade	Franchise Expo	Yom Kipper Services	
#223	260	5/22/99	Saturday	Trade	Financial Analyst		
#224	255	1/23/99	Saturday	Trade	NY Special Olympics		
#225	255	11/4/99	Thursday	Trade	Javits Masked Ball		

Table 1: Ranked Daily Attendance of 1999 Convention Center Events (Annual)

Rank	Estimated Attendance	Date	Day of Week	Show Type	Primary Event(s)		
#226	235	6/11/99	Friday	Trade	China Trade Expo		
#227	200	7/2/99	Friday	Trade	Worship Conference		
#228	200	7/3/99	Saturday	Trade	Worship Conference		
#229	155	5/11/99	Tuesday	Trade	IAEM Volley Ball		
#230	122	6/12/99	Saturday	Trade	China Trade Expo		
#231	115	7/4/99	Sunday	Trade	Worship Conference		
#232	105	6/18/99	Friday	Trade	Duane Reade		
#233	93	9/3/99	Friday	Trade	Data Warehousing		
#234	65	6/16/99	Wednesday	Trade	The View R4 to R5		
#235	45	5/21/99	Friday	Trade	Sisco Seminar		
#236	30	6/25/99	Friday	Trade	Wolmer's Meeting		
#237	0	1/1/99	Friday				
#238	0	1/13/99	Wednesday				
#239	0	1/14/99	Thursday				
#240	0	1/27/99	Wednesday				
#241	0	1/28/99	Thursday				
#242	0	1/29/99	Friday				
#243	0	2/5/99	Friday				
#244	0	2/6/99	Saturday				
#245	0	2/7/99	Sunday				
#246	0	2/8/99	Monday				
#247	0	2/9/99	Tuesday				
#248	0	2/10/99	Wednesday				
#249	0	2/17/99	Wednesday				
#250	0	2/18/99	Thursday				
#251	0	2/19/99	Friday				
#252	0	2/26/99	Friday				
#253	0	2/27/99	Saturday				
#254	0	3/1/99	Monday				
#255	0	3/2/99	Tuesday				
#256	0	3/3/99	Wednesday				
#257	0	3/10/99	Wednesday				
#258	0	3/11/99	Thursday				
#259	0	3/26/99	Friday				
#260	0	3/27/99	Saturday				
#261	0	3/28/99	Sunday				
#262	0	3/29/99	Monday				
#263	0	3/30/99	Tuesday				
#264	0	3/31/99	Wednesday				
#265	0	4/1/99	Thursday				
#266	0	4/2/99	Friday				
#267	0	4/12/99	Monday				
#268	0	4/13/99	Tuesday				
#269	0	4/14/99	Wednesday				
#270	0	4/23/99	Friday				
#271	0	4/24/99	Saturday				
#272	0	5/7/99	Friday				
#273	0	5/8/99	Saturday				
#274	0	5/10/99	Monday				
#275	0	5/12/99	Wednesday				
#276	0	5/13/99	Thursday				
#277	0	5/14/99	Friday				
#278	0	5/20/99	Thursday				
#279	0	5/28/99	Friday				
#280	0	5/29/99	Saturday				
#281	0	5/31/99	Monday				
#282	0	6/7/99	Monday				
#283	0	6/13/99	Sunday				
#284	0	6/14/99	Monday				
#285	0	6/15/99	Tuesday				
#286	0	6/19/99	Saturday				
#287	0	6/20/99	Sunday				
#288	0	6/21/99	Monday				
#289	0	6/26/99	Saturday				
#290	0	6/29/99	Tuesday				
#291	0	7/1/99	Thursday				
#292	0	7/5/99	Monday				
#293	0	7/6/99	Tuesday				
#294	0	7/8/99	Thursday				
#295	0	7/10/99	Saturday				
#296	0	7/15/99	Thursday				
#297	0	7/16/99	Friday				
#298	0	7/24/99	Saturday				
#299	0	7/25/99	Sunday				
#300	0	7/26/99	Monday				

Table 1: Ranked Daily Attendance of 1999 Convention Center Events (Annual)

Rank	Estimated Attendance	Date	Day of Week	Show Type	Primary Event(s)		
#301	0	7/29/99	Thursday				
#302	0	7/30/99	Friday				
#303	0	8/7/99	Saturday				
#304	0	8/11/99	Wednesday				
#305	0	8/12/99	Thursday				
#306	0	8/13/99	Friday				
#307	0	8/20/99	Friday				
#308	0	8/21/99	Saturday				
#309	0	8/22/99	Sunday				
#310	0	8/27/99	Friday				
#311	0	8/28/99	Saturday				
#312	0	8/29/99	Sunday				
#313	0	9/4/99	Saturday				
#314	0	9/5/99	Sunday				
#315	0	9/6/99	Monday				
#316	0	9/7/99	Tuesday				
#317	0	9/10/99	Friday				
#318	0	9/11/99	Saturday				
#319	0	9/12/99	Sunday				
#320	0	9/13/99	Monday				
#321	0	9/21/99	Tuesday				
#322	0	9/22/99	Wednesday				
#323	0	9/28/99	Tuesday				
#324	0	9/30/99	Thursday				
#325	0	10/9/99	Saturday				
#326	0	10/10/99	Sunday				
#327	0	10/11/99	Monday				
#328	0	10/12/99	Tuesday				
#329	0	10/13/99	Wednesday				
#330	0	10/14/99	Thursday				
#331	0	10/15/99	Friday				
#332	0	10/22/99	Friday				
#333	0	10/23/99	Saturday				
#334	0	10/24/99	Sunday				
#335	0	10/25/99	Monday				
#336	0	10/26/99	Tuesday				
#337	0	10/31/99	Sunday				
#338	0	11/3/99	Wednesday				
#339	0	11/5/99	Friday				
#340	0	11/10/99	Wednesday				
#341	0	11/11/99	Thursday				
#342	0	11/13/99	Saturday				
#343	0	11/15/99	Monday				
#344	0	11/22/99	Monday				
#345	0	11/25/99	Thursday				
#346	0	11/26/99	Friday				
#347	0	12/2/99	Thursday				
#348	0	12/4/99	Saturday				
#349	0	12/10/99	Friday				
#350	0	12/11/99	Saturday				
#351	0	12/12/99	Sunday				
#352	0	12/13/99	Monday				
#353	0	12/17/99	Friday				
#354	0	12/20/99	Monday				
#355	0	12/21/99	Tuesday				
#356	0	12/22/99	Wednesday				
#357	0	12/23/99	Thursday				
#358	0	12/24/99	Friday				
#359	0	12/25/99	Saturday				
#360	0	12/26/99	Sunday				
#361	0	12/27/99	Monday				
#362	0	12/28/99	Tuesday				
#363	0	12/29/99	Wednesday				
#364	0	12/30/99	Thursday				
#365	0	12/31/99	Friday				

Source: Eng-Wong, Taub & Associates, 2003.

3,379,732 Total Attendance
14,321 Average Attendance
28,205 85th Percentile Attendance
236 Event Days
129 Dark Days (Days When No Events Are Scheduled)



PB Team

NYCT – Number 7 Extension Project
2 Broadway-5th Floor, Mailbox 519
New York, NY 10004
Fax: 646-252-2063

approximately 10,000 to 30,000 attendees. It is important to note that in 1999, there were 129 dark days (days when no shows were scheduled). This was due to the inability of the Convention Center to book events back-to-back (because of move-in/move-out requirements), and the lack of demand to hold events on some holidays. The distribution of daily attendance at the Convention Center in 1999 is illustrated in Figure 1.

Based on precedent documented in several New York City-certified EIS's², peak attendance days are not utilized for analysis purposes, as they do not represent the most common circumstance. Instead a "design event day" condition with the 85th percentile daily attendance was identified to develop a reasonable worst-case scenario that would occur with enough frequency to warrant consideration for analysis. In 1999, the 85th percentile daily attendance was 28,205 (excluding dark days). This contrasts to the average daily attendance of 14,321.

Since daily attendance at the Convention Center is noticeably different on weekends compared to weekdays (20 of the top 50 attendance dates occurred on weekends), 1999 attendance data was further sorted by weekdays, Saturdays, and Sundays. Table 2 ranks 1999 attendance at weekday events, Table 3 ranks 1999 attendances at Saturday events, and Table 4 ranks attendance at Sunday events. As shown in Tables 2 through 4, the 85th percentile daily attendance was 26,550, 29,057, and 36,041 on weekdays, Saturdays, and Sundays, respectively. The 85th percentile daily attendance was higher on Sundays compared to Saturdays, which can be attributed to the occurrence of more combinations of trade shows that were held on Sundays (many of these shows began on Sunday and extended into the beginning of the week). Figure 2 shows the distribution of daily attendance on weekdays and Figure 3 shows the distribution of daily attendances on both Saturdays and Sundays.

Projected Attendance Patterns

The proposed expanded exhibition and meeting space at the Convention Center would be used to attract public shows with larger space requirements and to accommodate multiple, smaller-venue trade shows simultaneously. According to Convention Center management, attendance increases due to the expansion would be expected to differ between public and trade shows. Although public shows (such as the Auto Show, New York International Motorcycle Show, and PC Expo) may expand to fill the larger exhibition area, they are all expected to experience only a 15% increase in total visitation. However, the New York National Boat Show is the only public show that is neither expected to increase in size nor visitation, and instead could be coupled with a new four-day public show drawing approximately 80,000 total visitors. The proposed expansion would also afford small- and medium-sized trade shows (gift, fashion, and professional associations) the opportunity to expand their scopes, as well as to allow the Convention Center to schedule a greater number of simultaneous events. Based on the projections provided by Convention Center management, the visitation for all other shows (including trade shows) is expected to increase by 84% – approximately the same factor as the increase in floor space.

In order to project future 85th percentile attendance at the expanded Convention Center, the daily attendances at all Convention Center events held in 1999 (shown in Table 1) were

² -U.S.T.A. National Tennis Center Project, *Final Environmental Impact Statement*, New York City Departments of City Planning and Environmental Protection, July 23, 1993;
-34th Street Rezoning, *Final Environmental Impact Statement*, Allee King Rosen & Fleming, June 1990;
-The Rezoning of the Block Bounded by 42nd Street, 41st Street, 11th Avenue and 12th Avenue, *Final Environmental Impact Statement*, Vollmer Associates, 1989; and
-Ninth Avenue and 31st Street Project, *Final Environmental Impact Statement*, Allee King Rosen & Fleming/Vollmer Associates, December 1989.

Figure 1: 1999 Convention Center Annual Attendance

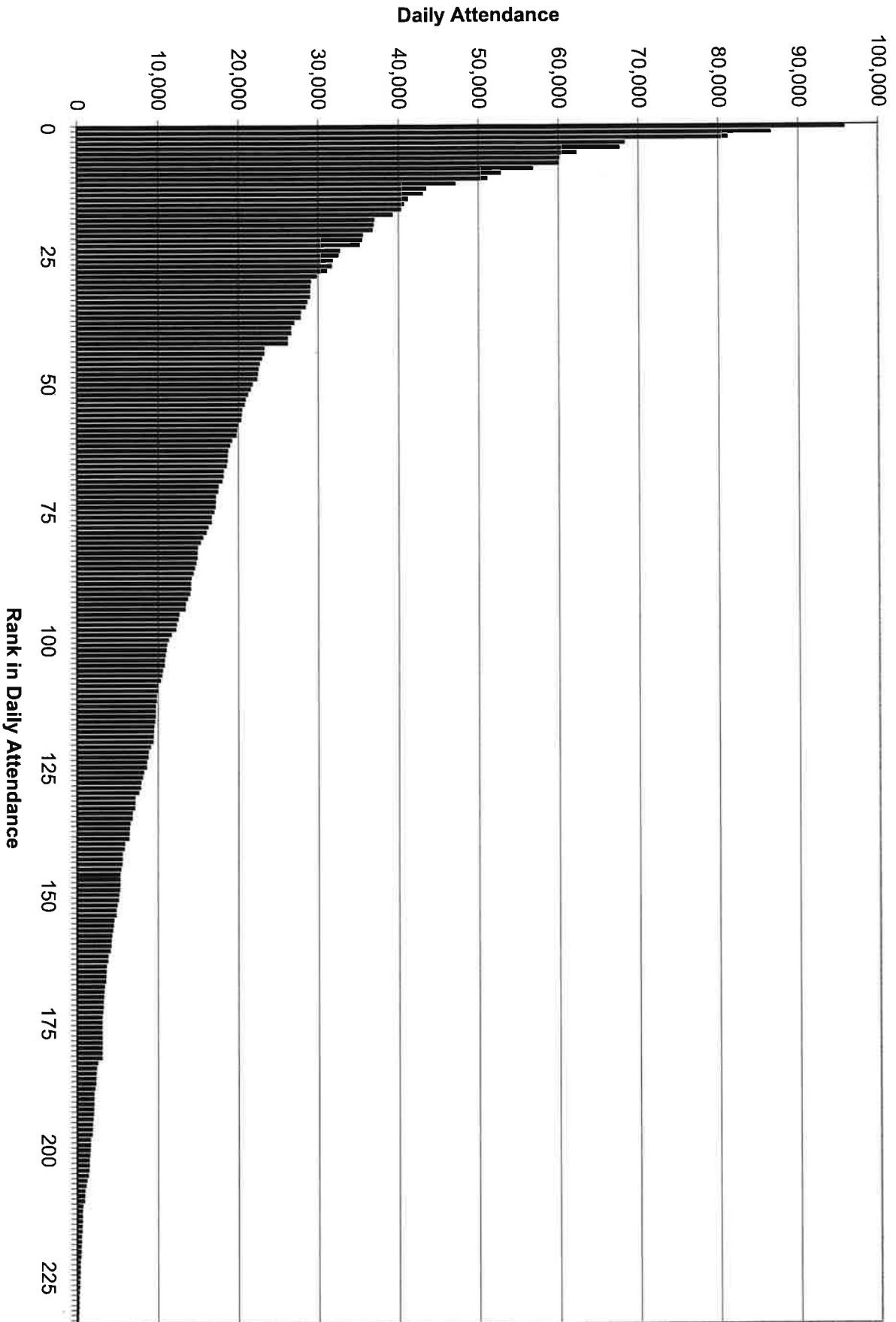


Table 2: Ranked Daily Attendance of 1999 Convention Center Events (Weekdays)

Rank	Estimated Attendance	Date	Day of Week	Show Type	Primary Event(s)			
#1	62,126	6/23/99	Wednesday	Public	PC Expo			
#2	60,047	6/22/99	Tuesday	Public	PC Expo			
#3	59,958	10/28/99	Thursday	Trade	Interplan/Design	Photo East Expo '99		
#4	52,692	10/29/99	Friday	Trade	Interplan/Design	Photo East Expo '99		
#5	51,004	4/9/99	Friday	Public	Int'l Auto Show			
#6	46,989	2/1/99	Monday	Trade	Int'l Gift Fair			
#7	41,075	4/8/99	Thursday	Public	Int'l Auto Show			
#8	40,577	8/16/99	Monday	Trade	Int'l Gift Fair			
#9	40,254	4/7/99	Wednesday	Public	Int'l Auto Show			
#10	39,220	2/2/99	Tuesday	Trade	Int'l Gift Fair			
#11	36,903	7/21/99	Wednesday	Public	Law Enforcement	MacWorld		
#12	35,327	6/24/99	Thursday	Public	PC Expo			
#13	35,058	4/6/99	Tuesday	Public	Int'l Auto Show			
#14	32,600	5/17/99	Monday	Trade	Contemp Furniture	Italian Style	Surtext	Nat'l Stationery
#15	32,371	4/5/99	Monday	Public	Int'l Auto Show			
#16	31,701	8/17/99	Tuesday	Trade	Int'l Gift Fair			
#17	31,651	8/2/99	Monday	Trade	Style Industrie	Fashion Boutique	Fashion Acc. Expo.	JA Jewelry
#18	31,023	10/6/99	Wednesday	Public	Fall Internet World			
#19	28,927	7/22/99	Thursday	Public	Law Enforcement	MacWorld		
#20	28,885	10/7/99	Thursday	Public	Fall Internet World			
#21	28,864	5/25/99	Tuesday	Trade	Fashion Boutique	Medical D & M	Finance Bus. Tech.	
#22	28,582	11/17/99	Wednesday	Trade	Chemical Expo	Financial Tech Expo	In-Cosmetic USA	
#23	27,782	5/26/99	Wednesday	Trade	Fashion Boutique	Medical D & M	Finance Bus. Tech.	
#24	27,716	11/8/99	Monday	Trade	Hotel/Motel/Rest.		Culinary Inst.	
#25	26,552	2/3/99	Wednesday	Trade	Int'l Gift Fair			
#26	26,550	11/16/99	Tuesday	Trade	Chemical Expo	Financial Tech Expo	In-Cosmetic USA	
#27	23,190	11/1/99	Monday	Trade	Fashion Boutique	Style Industrie	Fashion Accessories	
#28	22,905	5/4/99	Tuesday	Trade	Fashion Access.	On Demand Digital	Premium Incentive	
#29	22,594	9/24/99	Friday	Trade	Audio Engineering	Nat'l Merchandise	Retail Seek	
#30	22,439	5/18/99	Tuesday	Trade	Contemp Furniture	Italian Style	Surtext	Nat'l Stationery
#31	22,286	8/18/99	Wednesday	Trade	Int'l Gift Fair			
#32	21,703	8/3/99	Tuesday	Trade	Style Industrie	Fashion Boutique	Fashion Acc. Expo.	JA Jewelry
#33	21,499	9/15/99	Wednesday	Trade	Comp. Telephony	POP Show		
#34	21,145	4/20/99	Tuesday	Trade	Vibe Style	Interphex		
#35	20,818	4/27/99	Tuesday	Trade	Buildings NY	Fashion Fabric	Int'net & Elec Comm	
#36	20,687	6/8/99	Tuesday	Trade	Licensing '99	HBA Global Expo		
#37	20,390	8/24/99	Tuesday	Trade	Telecom Business			
#38	20,268	10/19/99	Tuesday	Trade	Fashion Boutique	Vibe Style	Kids Fashion	Off-price Spec.
#39	19,932	6/9/99	Wednesday	Trade	Licensing '99	HBA Global Expo		
#40	19,764	3/19/99	Friday	Trade	Int'l Vision Expo			
#41	19,121	11/18/99	Thursday	Trade	Chemical Expo	Financial Tech Expo	In-Cosmetic USA	Postage Stamps
#42	18,880	10/27/99	Wednesday	Trade	Interplan/Design			
#43	18,653	4/21/99	Wednesday	Trade	Interphex	Int'l Bus. Expo		
#44	18,550	4/28/99	Wednesday	Trade	Buildings NY	Fashion Fabric	Int'net & Elec Comm	
#45	18,427	1/25/99	Monday	Trade	Kids Fashion	JA Jewelry		
#46	17,902	2/12/99	Friday	Trade	Int'l Toy Fair			
#47	17,439	2/23/99	Tuesday	Trade	NY Rest. & Food	I.T. for Wall Street	NYS Law Exam	
#48	17,348	5/5/99	Wednesday	Trade	On Demand Digital	Premium Incentive		
#49	17,088	10/8/99	Friday	Public	Fall Internet World			
#50	17,037	10/18/99	Monday	Trade	Fashion Boutique	Vibe Style	Kids Fashion	Off-price Spec.
#51	16,892	5/24/99	Monday	Trade	Fashion Boutique			
#52	16,563	7/12/99	Monday	Trade	Fancy Food			
#53	16,149	7/23/99	Friday	Trade	MacWorld			
#54	15,474	3/8/99	Monday	Trade	Art Expo	Int'l Beauty Show		
#55	15,187	11/29/99	Monday	Trade	Greater NY Dental			
#56	14,818	9/27/99	Monday	Trade	Audio Engineering	Nat'l Merchandise	Style Industrie	
#57	14,759	11/30/99	Tuesday	Trade	Greater NY Dental			
#58	14,294	2/22/99	Monday	Trade	Style Industrie	NY Rest. & Food	I.T. for Wall Street	
#59	14,038	12/1/99	Wednesday	Trade	Greater NY Dental			
#60	13,959	9/1/99	Wednesday	Trade	Data Warehousing	Int'l Security Conf.		
#61	13,831	1/8/99	Friday	Public	Boat Show			
#62	13,291	9/14/99	Tuesday	Trade	Comp. Telephony			
#63	13,258	2/24/99	Wednesday	Trade	I.T. for Wall Street	NYS Law Exam		
#64	12,404	7/13/99	Tuesday	Trade	Fancy Food			
#65	12,204	9/16/99	Thursday	Trade	Comp. Telephony	POP Show	Show Biz Expo	
#66	12,096	1/26/99	Tuesday	Trade	Kids Fashion	JA Jewelry		
#67	11,516	3/9/99	Tuesday	Trade	Int'l Beauty Show			
#68	11,216	11/12/99	Tuesday	Trade	Fashion Boutique	Fashion Accessories		
#69	10,967	6/10/99	Thursday	Trade	Licensing '99	HBA Global Expo		
#70	10,896	2/15/99	Monday	Trade	Int'l Toy Fair	Variety Merchandise		
#71	10,772	10/20/99	Wednesday	Trade	Kids Fashion	Off-price Spec.	Int'l Fashion Fabric	
#72	10,700	11/9/99	Tuesday	Trade	Hotel/Motel/Rest.			
#73	10,446	8/31/99	Tuesday	Trade	Data Warehousing	Int'l Security Conf.		
#74	10,369	5/3/99	Monday	Trade	Style Industrie	Fashion Access.	On Demand Digital	
#75	10,176	4/22/99	Thursday	Trade	Interphex			
#76	9,704	5/6/99	Thursday	Trade	On Demand Digital	Premium Incentive		
#77	9,695	1/7/99	Thursday	Public	Boat Show			
#78	9,575	1/6/99	Wednesday	Public	Boat Show			
#79	9,557	1/19/99	Tuesday	Trade	Retail Federation	Magic East		
#80	9,389	12/14/99	Tuesday	Trade	E-Business Expo	Bazaar & Earthweb		
#81	9,321	1/18/99	Monday	Trade	Retail Federation			
#82	9,284	8/4/99	Wednesday	Trade	JA Jewelry			
#83	8,972	5/27/99	Thursday	Trade	Medical D & M	Finance Bus. Tech.		
#84	8,651	1/5/99	Tuesday	Public	Boat Show			
#85	8,478	8/23/99	Monday	Trade	Telecom Business			
#86	8,468	5/19/99	Wednesday	Trade	Nat'l Stationery			
#87	7,961	12/15/99	Wednesday	Trade	E-Business Expo	Bazaar & Earthweb		
#88	7,804	8/25/99	Wednesday	Trade	Telecom Business			
#89	7,735	9/2/99	Thursday	Trade	Data Warehousing	Int'l Security Conf.		
#90	7,510	6/17/99	Thursday	Trade	TCI Commencement			
#91	7,052	8/9/99	Monday	Trade	Kids Fashion	Music Expo		
#92	7,051	2/4/99	Thursday	Trade	Int'l Gift Fair			

Table 2: Ranked Daily Attendance of 1999 Convention Center Events (Weekdays)

Rank	Estimated Attendance	Date	Day of Week	Show Type	Primary Event(s)			
#93	7,015	1/4/99	Monday	Public	Boat Show			
#94	6,728	3/5/99	Friday	Trade	Art Expo			
#95	6,716	10/5/99	Tuesday	Public	Fall Internet World			
#96	6,466	7/14/99	Wednesday	Trade	Fancy Food			
#97	6,354	3/4/99	Thursday	Trade	Art Expo			
#98	6,324	4/29/99	Thursday	Trade	Fashion Fabric	Inf'net & Elec Comm		
#99	6,300	2/25/99	Thursday	Trade	I.T. for Wall Street			
#100	5,759	10/4/99	Monday	Trade	NY Fall Textile	Fall Internet World		
#101	5,525	3/15/99	Monday	Trade	Int'l Kids Fashion	Vinisud USA		
#102	5,499	4/19/99	Monday	Trade	Vibe Style			
#103	5,353	8/19/99	Thursday	Trade	Int'l Gift Fair			
#104	5,205	6/28/99	Monday	Trade	Chairman's Address			
#105	5,205	7/20/99	Tuesday	Trade	Merchandise	Law Enforcement		
#106	5,185	1/15/99	Friday	Public	Int'l Motorcycle			
#107	5,056	4/30/99	Friday	Trade	CUNY Job Fair			
#108	5,025	12/16/99	Thursday	Trade	E-Business Expo	Bazaar & Earthweb		
#109	4,878	8/10/99	Tuesday	Trade	Kids Fashion	Music Expo		
#110	4,742	4/16/99	Friday	Trade	Erotica			
#111	4,477	3/16/99	Tuesday	Trade	Int'l Kids Fashion	Vinisud USA		
#112	4,410	6/3/99	Thursday	Trade	China Trade	Living Better Expo	Agriflor	
#113	4,154	12/8/99	Wednesday	Trade	Java Business	Criminal Justice		
#114	4,135	10/21/99	Thursday	Trade	Int'l Fashion Fabric			
#115	4,009	1/20/99	Wednesday	Trade	Retail Federation	Magic East		
#116	3,555	12/7/99	Tuesday	Trade	Java Business			
#117	3,492	2/11/99	Thursday	Trade	Int'l Toy Fair			
#118	3,432	6/4/99	Friday	Trade	Agriflor			
#119	3,290	9/17/99	Friday	Trade	Show Biz Expo	Franchise Expo		
#120	3,205	6/30/99	Wednesday	Trade	Bar Review			
#121	3,147	7/27/99	Tuesday	Trade	NYS Bar Exam			
#122	3,147	7/28/99	Wednesday	Trade	NYS Bar Exam			
#123	3,030	4/15/99	Thursday	Trade	Erotica			
#124	3,005	8/6/99	Friday	Trade	US Immig & Nat.			
#125	3,005	8/26/99	Thursday	Trade	US Immig & Nat.			
#126	3,005	11/12/99	Friday	Trade	Sylvia Browne			
#127	2,304	12/9/99	Thursday	Trade	Java Business	Criminal Justice		
#128	2,259	3/18/99	Thursday	Trade	Int'l Kids Fashion			
#129	2,222	10/1/99	Friday	Trade	NY Fall Textile			
#130	2,208	3/22/99	Monday	Trade	Fashion Boutique			
#131	2,094	4/26/99	Monday	Trade	Buildings NY			
#132	2,005	7/9/99	Friday	Trade	Local 638 Vote			
#133	2,005	8/5/99	Thursday	Trade	Gibbs Graduation			
#134	2,000	9/23/99	Thursday	Trade	Retail Seek			
#135	1,961	3/17/99	Wednesday	Trade	Int'l Kids Fashion			
#136	1,943	1/21/99	Thursday	Trade	Magic East			
#137	1,875	7/19/99	Monday	Trade	Merchandise			
#138	1,835	8/30/99	Monday	Trade	Data Warehousing			
#139	1,805	9/8/99	Wednesday	Trade	Sun Microsystems			
#140	1,769	2/16/99	Tuesday	Trade	Variety Merchandise			
#141	1,546	3/23/99	Tuesday	Trade	Fashion Boutique	Sero Scholarship		
#142	1,535	1/22/99	Friday	Trade	Magic East			
#143	1,505	3/25/99	Thursday	Trade	Mercedes Benz			
#144	1,475	9/9/99	Thursday	Trade	Sun Microsystems			
#145	1,405	9/20/99	Monday	Trade	Yom Kipper Services			
#146	1,385	3/12/99	Friday	Trade	Limo Transpo			
#147	1,078	11/19/99	Friday	Trade	Postage Stamps			
#148	788	6/2/99	Wednesday	Trade	China Trade	Living Better Expo		
#149	600	11/1/99	Monday	Trade	MCS East Meeting			
#150	505	6/1/99	Tuesday	Trade	China Trade			
#151	505	9/29/99	Wednesday	Trade	KW Training			
#152	505	12/3/99	Friday	Trade	Banker's Trust Party			
#153	495	11/2/99	Tuesday	Trade	MCS East Meeting			
#154	487	12/6/99	Monday	Trade	Java Business			
#155	405	3/24/99	Wednesday	Trade	Aging Brain			
#156	405	7/7/99	Wednesday	Trade	KW Training			
#157	380	11/23/99	Tuesday	Trade	America Sings			
#158	380	11/24/99	Wednesday	Trade	America Sings			
#159	255	11/4/99	Thursday	Trade	Javits Masked Ball			
#160	235	6/11/99	Friday	Trade	China Trade Expo			
#161	200	7/2/99	Friday	Trade	Worship Conference			
#162	155	5/11/99	Tuesday	Trade	IAEM Volley Ball			
#163	105	6/18/99	Friday	Trade	Duane Reade			
#164	93	9/3/99	Friday	Trade	Data Warehousing			
#165	65	6/16/99	Wednesday	Trade	The View R4 to R5			
#166	45	5/21/99	Friday	Trade	Sisco Seminar			
#167	30	6/25/99	Friday	Trade	Wolmer's Meeting			
#168	0	1/1/99	Friday					
#169	0	1/13/99	Wednesday					
#170	0	1/14/99	Thursday					
#171	0	1/27/99	Wednesday					
#172	0	1/28/99	Thursday					
#173	0	1/29/99	Friday					
#174	0	2/5/99	Friday					
#175	0	2/8/99	Monday					
#176	0	2/9/99	Tuesday					
#177	0	2/10/99	Wednesday					
#178	0	2/17/99	Wednesday					
#179	0	2/18/99	Thursday					
#180	0	2/19/99	Friday					
#181	0	2/26/99	Friday					
#182	0	3/1/99	Monday					
#183	0	3/2/99	Tuesday					
#184	0	3/3/99	Wednesday					

Table 2: Ranked Daily Attendance of 1999 Convention Center Events (Weekdays)

Rank	Estimated Attendance	Date	Day of Week	Show Type	Primary Event(s)
#185	0	3/10/99	Wednesday		
#186	0	3/11/99	Thursday		
#187	0	3/26/99	Friday		
#188	0	3/29/99	Monday		
#189	0	3/30/99	Tuesday		
#190	0	3/31/99	Wednesday		
#191	0	4/1/99	Thursday		
#192	0	4/2/99	Friday		
#193	0	4/12/99	Monday		
#194	0	4/13/99	Tuesday		
#195	0	4/14/99	Wednesday		
#196	0	4/23/99	Friday		
#197	0	5/7/99	Friday		
#198	0	5/10/99	Monday		
#199	0	5/12/99	Wednesday		
#200	0	5/13/99	Thursday		
#201	0	5/14/99	Friday		
#202	0	5/20/99	Thursday		
#203	0	5/28/99	Friday		
#204	0	5/31/99	Monday		
#205	0	6/7/99	Monday		
#206	0	6/14/99	Monday		
#207	0	6/15/99	Tuesday		
#208	0	6/21/99	Monday		
#209	0	6/29/99	Tuesday		
#210	0	7/1/99	Thursday		
#211	0	7/5/99	Monday		
#212	0	7/6/99	Tuesday		
#213	0	7/8/99	Thursday		
#214	0	7/15/99	Thursday		
#215	0	7/16/99	Friday		
#216	0	7/26/99	Monday		
#217	0	7/29/99	Thursday		
#218	0	7/30/99	Friday		
#219	0	8/11/99	Wednesday		
#220	0	8/12/99	Thursday		
#221	0	8/13/99	Friday		
#222	0	8/20/99	Friday		
#223	0	8/27/99	Friday		
#224	0	9/6/99	Monday		
#225	0	9/7/99	Tuesday		
#226	0	9/10/99	Friday		
#227	0	9/13/99	Monday		
#228	0	9/21/99	Tuesday		
#229	0	9/22/99	Wednesday		
#230	0	9/28/99	Tuesday		
#231	0	9/30/99	Thursday		
#232	0	10/11/99	Monday		
#233	0	10/12/99	Tuesday		
#234	0	10/13/99	Wednesday		
#235	0	10/14/99	Thursday		
#236	0	10/15/99	Friday		
#237	0	10/22/99	Friday		
#238	0	10/25/99	Monday		
#239	0	10/26/99	Tuesday		
#240	0	11/3/99	Wednesday		
#241	0	11/5/99	Friday		
#242	0	11/10/99	Wednesday		
#243	0	11/11/99	Thursday		
#244	0	11/15/99	Monday		
#245	0	11/22/99	Monday		
#246	0	11/25/99	Thursday		
#247	0	11/26/99	Friday		
#248	0	12/2/99	Thursday		
#249	0	12/10/99	Friday		
#250	0	12/13/99	Monday		
#251	0	12/17/99	Friday		
#252	0	12/20/99	Monday		
#253	0	12/21/99	Tuesday		
#254	0	12/22/99	Wednesday		
#255	0	12/23/99	Thursday		
#256	0	12/24/99	Friday		
#257	0	12/27/99	Monday		
#258	0	12/28/99	Tuesday		
#259	0	12/29/99	Wednesday		
#260	0	12/30/99	Thursday		
#261	0	12/31/99	Friday		

Source: Eng-Wong, Taub & Associates, 2003.

12,824 Average Attendance
26,550 85th Percentile Attendance
167 Event Days
94 Dark Days (Days When No Events Are Scheduled)

Table 3: Ranked Daily Attendance of 1999 Convention Center Events (Saturdays)

Rank	Estimated Attendance	Date	Day of Week	Show Type	Primary Event(s)		
#1	95,707	4/10/99	Saturday	Public	Int'l Auto Show		
#2	86,483	4/3/99	Saturday	Public	Int'l Auto Show		
#3	67,516	1/9/99	Saturday	Public	Boat Show	Fashion Boutique	Style Industrie
#4	36,821	1/2/99	Saturday	Public	Boat Show		
#5	29,767	9/25/99	Saturday	Trade	Audio Engineering	Nat'l Merchandise	Style Industrie
#6	28,346	11/6/99	Saturday	Trade	Hotel/Motel/Rest.		
#7	26,939	10/30/99	Saturday	Trade	Photo East Expo '99	NYS Teachers Exam	
#8	23,174	2/13/99	Saturday	Trade	Int'l Toy Fair	Variety Merchandise	
#9	20,314	3/20/99	Saturday	Trade	Int'l Vision Expo	Fashion Boutique	
#10	16,556	12/18/99	Saturday	Trade	Kwanzaa Holiday		
#11	14,766	1/16/99	Saturday	Public	Int'l Motorcycle	NYS Teachers Exam	
#12	14,470	2/20/99	Saturday	Trade	Style Industrie	Church of Christ	
#13	12,517	7/31/99	Saturday	Trade	Style Industrie	Fashion Boutique	
#14	9,811	1/30/99	Saturday	Trade	Int'l Gift Fair		
#15	9,600	3/6/99	Saturday	Trade	Art Expo	Int'l Beauty Show	
#16	9,512	8/14/99	Saturday	Trade	Int'l Gift Fair		
#17	9,365	5/15/99	Saturday	Trade	Contemp Furniture	Italian Style	
#18	8,686	4/17/99	Saturday	Trade	Erotica	Gay & Lesbian Bus.	Teachers Exam
#19	4,745	6/5/99	Saturday	Trade	Agriflor	Financial Analyst	
#20	4,202	10/16/99	Saturday	Trade	Fashion Boutique		
#21	3,768	10/2/99	Saturday	Trade	NY Fall Textile		
#22	3,733	5/1/99	Saturday	Trade	Style Industrie		
#23	3,519	9/18/99	Saturday	Trade	Show Biz Expo	Franchise Expo	
#24	3,094	11/27/99	Saturday	Trade	Greater NY Dental		
#25	1,360	11/20/99	Saturday	Trade	Postage Stamps		
#26	1,272	3/13/99	Saturday	Trade	Limo Transpo		
#27	855	7/17/99	Saturday	Trade	NYS Teachers Exam		
#28	260	5/22/99	Saturday	Trade	Financial Analyst		
#29	255	1/23/99	Saturday	Trade	NY Special Olympics		
#30	200	7/3/99	Saturday	Trade	Worship Conference		
#31	122	6/12/99	Saturday	Trade	China Trade Expo		
#32	0	2/6/99	Saturday				
#33	0	2/27/99	Saturday				
#34	0	3/27/99	Saturday				
#35	0	4/24/99	Saturday				
#36	0	5/6/99	Saturday				
#37	0	5/29/99	Saturday				
#38	0	6/19/99	Saturday				
#39	0	6/26/99	Saturday				
#40	0	7/10/99	Saturday				
#41	0	7/24/99	Saturday				
#42	0	8/7/99	Saturday				
#43	0	8/21/99	Saturday				
#44	0	8/28/99	Saturday				
#45	0	9/4/99	Saturday				
#46	0	9/11/99	Saturday				
#47	0	10/9/99	Saturday				
#48	0	10/23/99	Saturday				
#49	0	11/13/99	Saturday				
#50	0	12/4/99	Saturday				
#51	0	12/11/99	Saturday				
#52	0	12/25/99	Saturday				

Source: Eng-Wong, Taub & Associates, 2003.

17,669 Average Attendance
 29,057 85th Percentile Attendance
 31 Event Days
 21 Dark Days (Days When No Events Are Scheduled)

Table 4: Ranked Daily Attendance of 1999 Convention Center Events (Sundays)

Rank	Estimated Attendance	Date	Day of Week	Show Type	Primary Event(s)			
#1	81,056	4/11/99	Sunday	Public	Int'l Auto Show			
#2	68,202	4/4/99	Sunday	Public	Int'l Auto Show			
#3	56,724	1/31/99	Sunday	Trade	Int'l Gift Fair			
#4	43,369	8/15/99	Sunday	Trade	Int'l Gift Fair			
#5	42,985	1/10/99	Sunday	Public	Boat Show	Fashion Boutique	Style Industrie	Fashion Accessories
#6	36,720	8/1/99	Sunday	Trade	Style Industrie	Fashion Boutique	Fashion Acc. Expo.	JA Jewelry
#7	35,486	5/16/99	Sunday	Trade	Contemp Furniture	Italian Style	Surtext	Natl Stationery
#8	29,009	9/26/99	Sunday	Trade	Audio Engineering	Nat'l Merchandise	Style Industrie	
#9	26,163	11/7/99	Sunday	Trade	Hotel/Motel/Rest.			
#10	26,141	3/7/99	Sunday	Trade	Art Expo	Int'l Beauty Show		
#11	22,381	1/24/99	Sunday	Trade	Kids Fashion	JA Jewelry		
#12	19,662	11/28/99	Sunday	Trade	Greater NY Dental			
#13	18,562	2/14/99	Sunday	Trade	Int'l Toy Fair	Variety Merchandise		
#14	18,088	10/17/99	Sunday	Trade	Fashion Boutique	Vibe Style	Kids Fashion	
#15	18,074	1/3/99	Sunday	Public	Boat Show	Church of Christ		
#16	17,068	7/1/99	Sunday	Trade	Fancy Food			
#17	15,904	5/23/99	Sunday	Trade	Fashion Boutique			
#18	14,616	3/21/99	Sunday	Trade	Int'l Vision Expo	Fashion Boutique		
#19	13,981	2/21/99	Sunday	Trade	Style Industrie	NY Rest. & Food		
#20	13,564	12/19/99	Sunday	Trade	Kwanzaa Holiday	Church of Christ		
#21	10,658	4/18/99	Sunday	Trade	Erotica	Gay & Lesbian Bus.	Vibe Style	
#22	9,873	1/17/99	Sunday	Public	Int'l Motorcycle			
#23	8,130	5/2/99	Sunday	Trade	Style Industrie	Fashion Access.		
#24	5,824	3/14/99	Sunday	Trade	Int'l Kids Fashion			
#25	5,510	6/27/99	Sunday	Trade	Church of Christ	Local 638 Vote		
#26	5,218	8/8/99	Sunday	Trade	Kids Fashion			
#27	4,313	10/3/99	Sunday	Trade	NY Fall Textile			
#28	3,255	5/30/99	Sunday	Trade	Church of Christ			
#29	3,005	2/28/99	Sunday	Trade	Church of Christ			
#30	3,005	5/9/99	Sunday	Trade	Church of Christ			
#31	3,005	6/6/99	Sunday	Trade	Church of Christ			
#32	3,005	11/14/99	Sunday	Trade	Church of Christ			
#33	3,005	12/5/99	Sunday	Trade	Penny Harvest			
#34	2,470	7/18/99	Sunday	Trade	Merchandise			
#35	1,005	4/25/99	Sunday	Trade	Childrens Museum			
#36	825	11/21/99	Sunday	Trade	Postage Stamps			
#37	333	9/19/99	Sunday	Trade	Franchise Expo	Yom Kippur Services		
#38	115	7/4/99	Sunday	Trade	Worship Conference			
#39	0	2/7/99	Sunday					
#40	0	3/28/99	Sunday					
#41	0	6/13/99	Sunday					
#42	0	6/20/99	Sunday					
#43	0	7/25/99	Sunday					
#44	0	8/22/99	Sunday					
#45	0	8/29/99	Sunday					
#46	0	9/5/99	Sunday					
#47	0	9/12/99	Sunday					
#48	0	10/10/99	Sunday					
#49	0	10/24/99	Sunday					
#50	0	10/31/99	Sunday					
#51	0	12/12/99	Sunday					
#52	0	12/26/99	Sunday					

Source: Eng-Wong, Taub & Associaes, 2003.

18,166 **Average Attendance**
36,041 **85th Percentile Attendance**
38 **Event Days**
14 **Dark Days (Days When No Events Are Scheduled)**

Figure 2: 1999 Convention Center Weekday Attendance

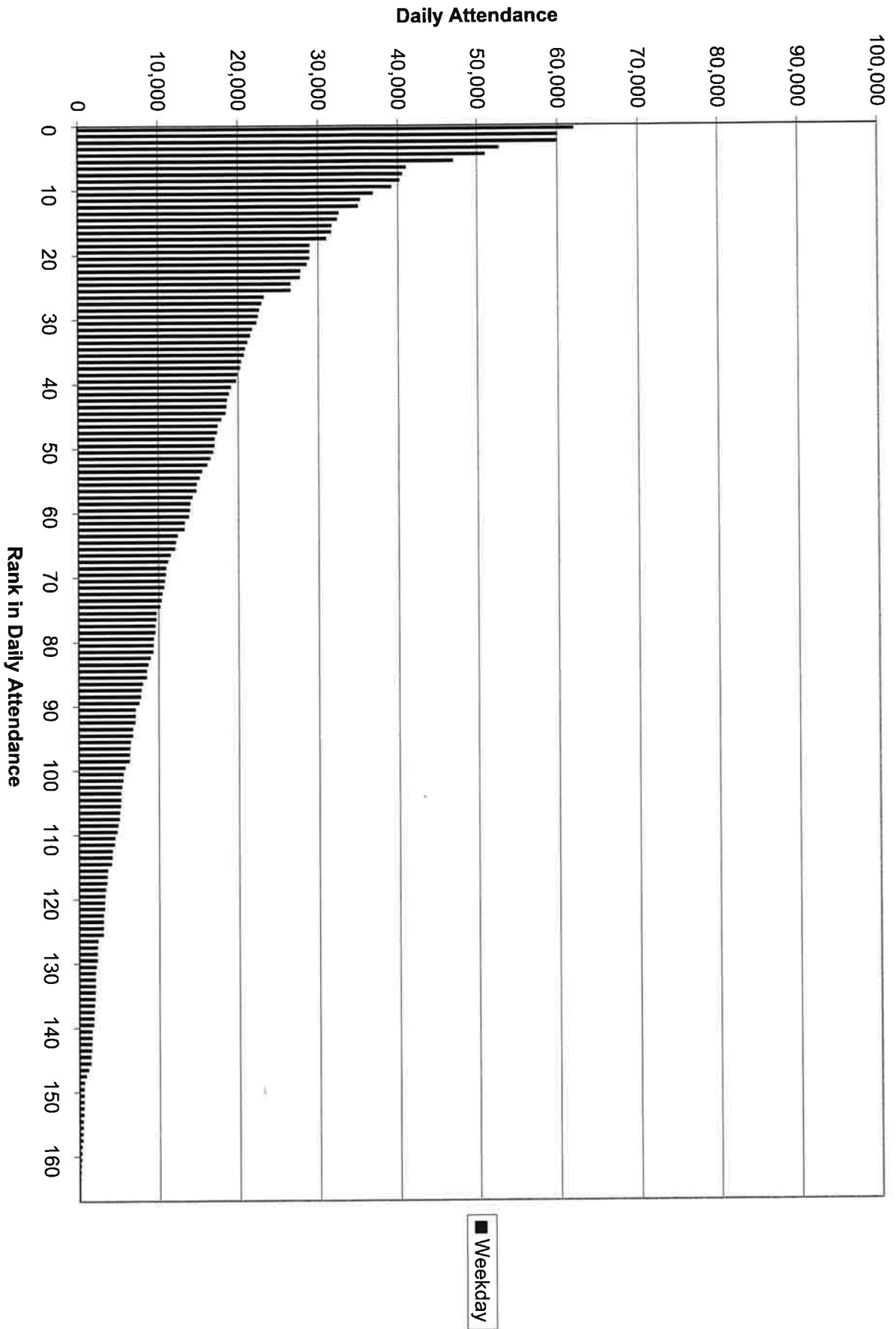
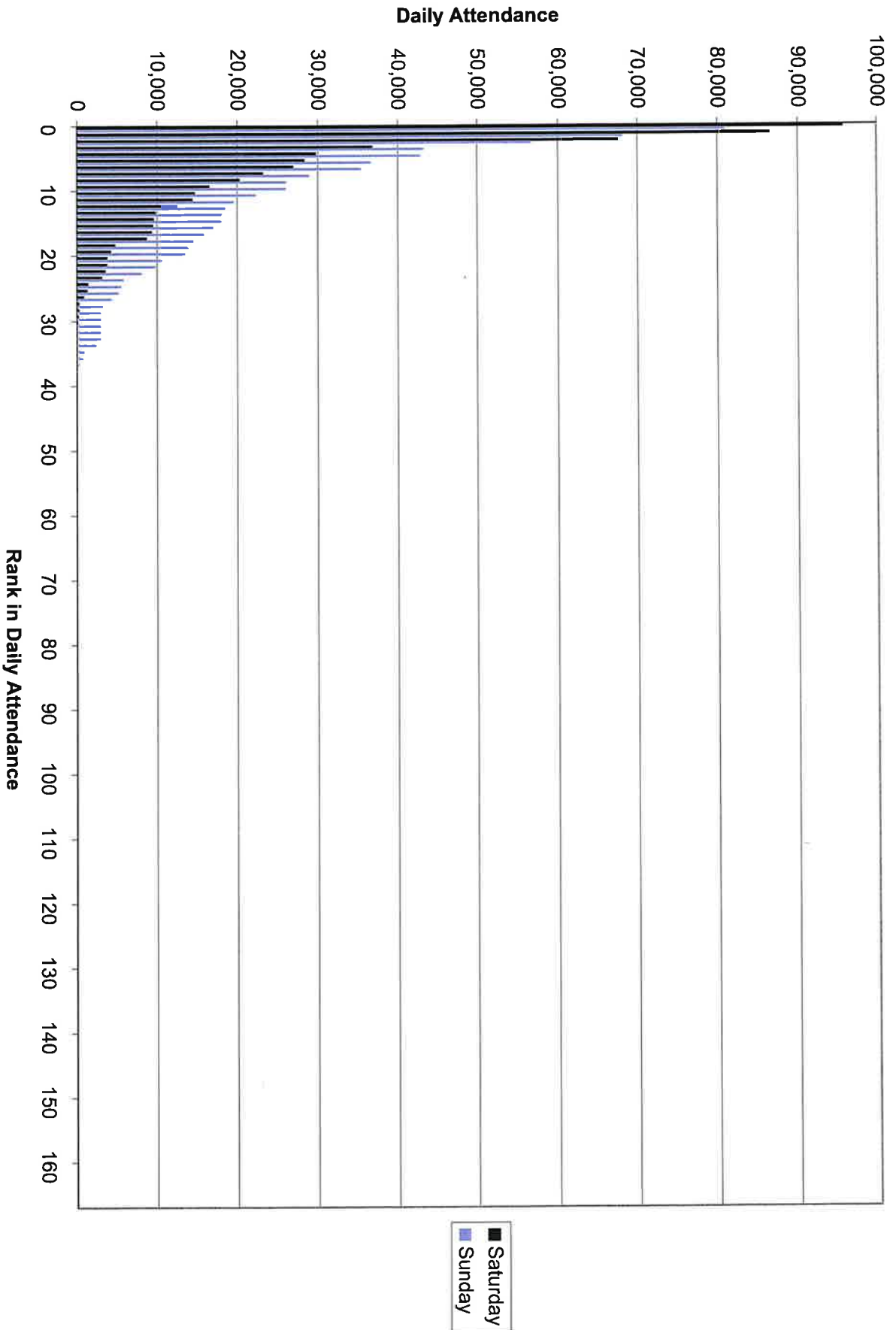


Figure 3: 1999 Convention Center Weekend Attendance





increased by the methodologies described above (e.g. public show attendances were increased by 15% and trade show attendances were increased by 84%). This methodology is based on the current Convention Center schedule, however the expansion of the Convention Center could allow for greater flexibility in the scheduling of some future events. As an example, events could be open to the public in the existing portion of the facility, while other events could be moving in/out in the expanded portion (in essence reducing the total amount of dark days). Because dark days were not included in the calculation of current 85th percentile attendance, this methodology conservatively assumes the worst-case scenario in that the increased attendance would not be spread over a greater number of days. Table 5 provides a comparison of existing and projected 85th percentile attendance for weekdays, Saturdays, and Sundays. As shown in Table 5, a resulting 65.4% increase in overall daily visitation is expected. Figure 4 contains an overlay of the annual distribution of projected daily attendance over existing daily attendance.

Table 5: Existing and Projected 85th Percentile Daily Attendances

	Existing	Projected	Net Increase (Percent)
Weekday	28,188	43,107 ¹	14,919 (+52.9%)
Saturday	30,849	56,763	25,914 (+84.0%)
Sunday	38,265	62,684	24,419 (+63.8%)
Overall	29,945	49,539	19,594 (+65.4%)

Source: Eng-Wong Taub & Associates, 2003. 1999 existing attendances were conservatively increased to account for modest growth experienced in Convention Center between 1999 and 2000 (an overall increase of 6.2%).

Notes: 1. Refer to "Analysis of Concurrent Weekday Convention Event at Multi-Use Facility" below.

For comparative purposes, attendance patterns at the Orange County Convention Center (Orlando, FL) were obtained for 1983-2002, during which time the facility underwent two major expansions (in 1989 and 1996³). After both expansions, the size of the exhibition and meeting areas more than doubled, while attendance increased by approximately 45 percent and 60 percent, respectively (see Table 6). Therefore, the projected 65.4% increase of annual visitation at the Javits Convention Center is comparable to the empirical trends observed at the Orange County Convention Center (e.g. overall attendance would not increase in the same proportion as the amount of new expansion space). This trend of increased attendance was also projected for the expansion of the Spokane Convention Center (Spokane, WA) in that size of the facility would be expanded from 120,600 to 293,600 square feet (an increase of 143%) but that future attendance would essentially double.⁴

Analysis of Concurrent Weekday Convention Event at Multi-Use Facility

Subsequent to the publication of the DGEIS, concurrent convention events at the expanded Convention Center and proposed Multi-Use Facility were analyzed to represent the reasonable worst-case scenario for events occurring during the Weekday AM, Midday, and PM peak hours. A weekday trade show at the Multi-Use Facility would be expected to draw an 85th percentile daily attendance of 8,625. Conversely, refinements to the program for the Convention Center expansion have reduced the size of the total expanded exhibition space by approximately 60,000 square feet. For this reason, the projected 85th percentile weekday daily attendance at the expanded Convention Center was reduced from 43,107 to 40,882, resulting in a net total weekday convention event attendance (at both the expanded Convention Center and Multi-Use

³ Ann Fisher, Orange County Convention Center Marketing-Research, July 15, 2003.

⁴ Spokane Convention Center Expansion Transportation Impact Analysis, The Transpo Group, January 2003.

Figure 4 - Existing and Projected Convention Center Attendance Patterns

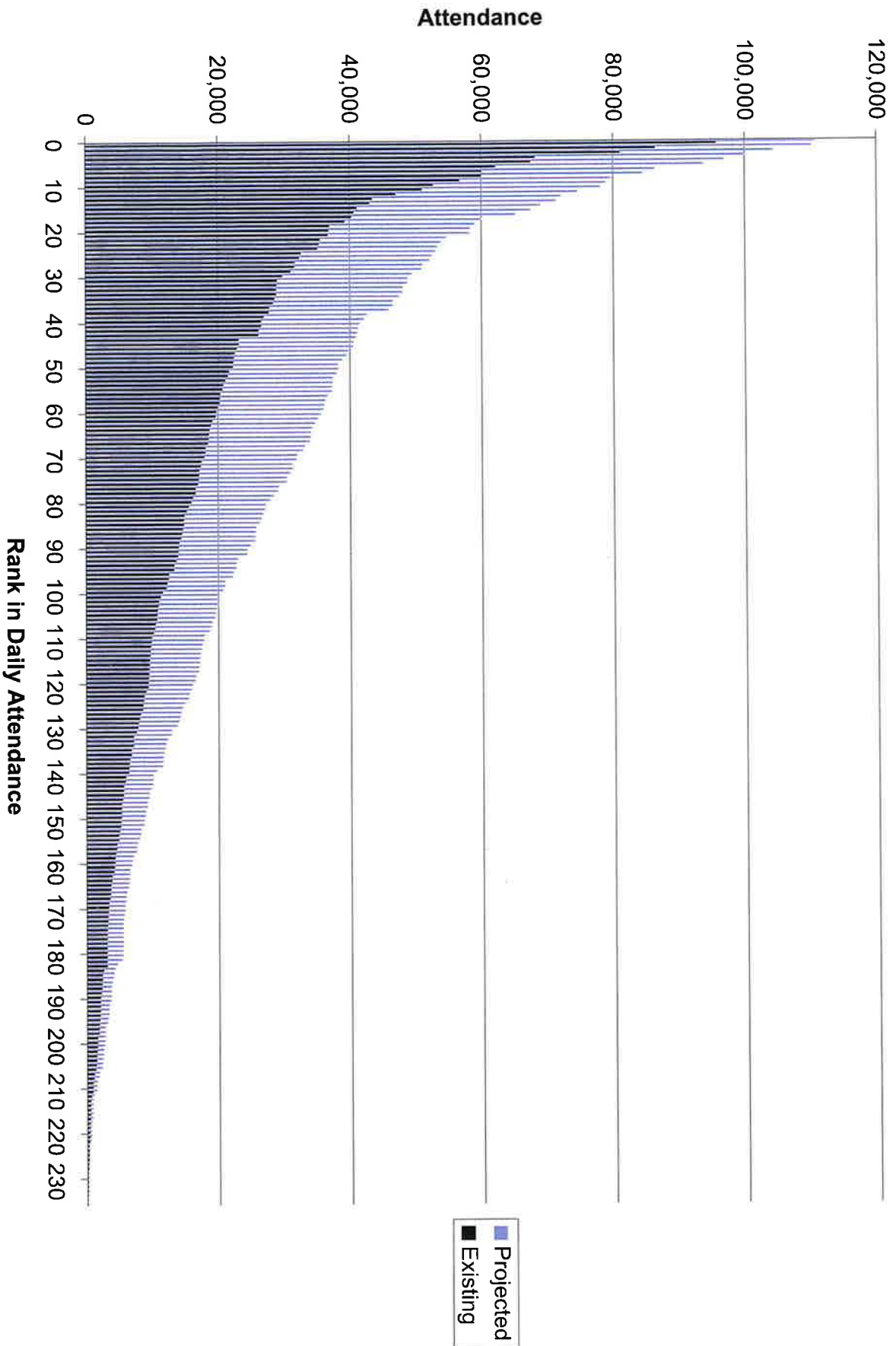


Table 6: Effects of Expansion on Attendance Patterns at Orange County Convention Center

Annual Attendance at the Orange County Convention Center (1983-2002)

Year	Conventions & Tradeshows # of Events Attendance	Consumer Shows # of Events Attendance	Banquets # of Events Attendance	Meetings # of Events Attendance	Public Ticketed Events # of Events Attendance	Totals # of Events Attendance	Average Attendance	Percent Increase	Exhibition and Meeting Area (sf)	Percent Increase
1983	12 55,440	6 30,704	23 11,076	58 45,763	30 199,939	129 342,982				
1984	16 163,707	9 61,736	26 10,726	43 37,566	25 187,866	119 461,601				
1985	23 155,213	16 63,923	22 7,082	45 123,247	29 151,106	135 500,571	432,946	-	177,113	-
1986	30 201,560	11 61,569	11 3,944	46 51,151	14 65,584	112 383,808				
1987	24 145,368	17 118,142	11 7,541	50 24,275	21 134,573	123 429,899				
1988	34 218,827	15 119,861	12 3,296	94 30,486	15 106,344	170 478,814				
1989	60 342,770	27 164,400	18 4,820	143 70,757	6 17,867	254 600,614				
1990	66 376,973	16 115,555	27 15,153	125 74,198	5 14,171	239 596,050				
1991	58 314,802	14 139,240	14 6,647	107 84,272	3 24,451	196 569,412				
1992	66 425,950	12 128,557	11 7,274	80 58,871	8 36,897	177 657,549	628,405	45%	417,969	136%
1993	73 396,218	11 98,367	4 3,460	67 43,010	4 27,900	159 568,955				
1994	81 499,572	13 126,007	8 5,106	84 51,539	2 23,600	188 705,824				
1995	82 485,722	15 132,840	2 4,043	68 55,901	1 21,923	168 700,429				
1996	114 848,911	10 118,171	9 3,827	107 46,770	0 0	240 1,017,679				
1997	121 758,967	6 103,730	7 9,867	119 50,864	7 14,355	260 930,219				
1998	115 837,611	7 78,665	7 2,832	108 50,864	7 12,394	244 982,366				
1999	120 891,873	9 97,177	14 7,344	72 22,543	1 4,000	216 1,022,937	1,003,736	60%	1,416,678	239%
2000	116 921,247	7 102,790	6 2,881	76 25,228	0 0	205 1,052,146				
2001	105 702,142	8 107,705	2 2,200	75 25,632	1 4,800	191 842,479				
2002	90 811,652	10 151,048	1 500	95 47,595	4 6,275	200 1,017,070				

Source: Orange County Convention Center (Orlando, FL)

Note: Attendance data from 2001 not included in 1996-2002 average.

Previous Expansions of Orange County Convention Center

Construction Phase	Completion Date	Exhibition Space (sf)	Meeting Space (sf)	Total Space (sf)
Phase #1	February 1983	147,510	29,603	177,113
Phase #2 (Expansion)	January 1989	344,790	73,179	417,969
Phase #3 (Expansion)	January 1996	728,190	213,457	941,647
Phase #4 (Expansion)	August 1996	1,095,390	313,140	1,408,530
Phase #1 Retrofit	December 1997	1,103,538	313,140	1,416,678

Source: Orange County Convention Center (Orlando, FL)



PB Team

NYCT – Number 7 Extension Project
2 Broadway -5th Floor, Mailbox 519
New York, NY 10004
Fax: 646-252-2063

Facility) of 49,507. The same trip generation assumptions contained within this technical memorandum were applied to a weekday convention event at the Multi-Use Facility.

Existing and Projected Convention Center Employment

Table 7 shows the number of existing and projected employees at the Convention Center. The travel demand associated with full-time workers (those working standard day shifts) will be assumed to be similar to those of other office workers in the rezoning area and will therefore be projected based on the methodologies contained within the Office Trip Generation Transportation Planning Assumptions Technical Memorandum⁵. The travel demand associated with all other Convention Center employees (mainly temporary workers) will be based on recent travel surveys completed by Convention Center event staff, which is described in more detail in the following section.

Table 7: Existing and Projected Convention Center Employees

Type	Existing	Projected	Net Increase
Full-time	150	200	50
Temporary	970	1,470	500
Contractors	107	142	35
Totals	1,227	1,812	585

Source: Hellmuth, Obata, and Kassabaum, 2003.

Convention Center Travel Surveys

Because existing travel pattern data for the Convention Center are limited, detailed travel surveys were conducted by Eng-Wong Taub & Associates (EWT) at a public show on Sunday, April 27, 2003 (the New York International Auto Show) and at a combination of trade shows on Tuesday, May 6, 2003 (Industry 212 incorporating Femme, Accessories the Show/MODA Manhattan, and Lightfair)⁶. The two surveys included manual door counts (to determine the overall variation of temporal distributions throughout the day) and visitor surveys (to determine trip origins and destinations, mode of travel, durations of visits, and travel patterns specific to both attendees and exhibitors). Survey forms were also completed by event staff,⁷ which make up a sizeable portion of the total Convention Center employment (as shown in Table 7).

Trip Origins and Destinations

Table 8 shows the origins and destinations of Convention Center attendees, exhibitors, and event staff for both the weekend public show and weekday trade shows, which were obtained from interviews as part of the EWT surveys. As shown in Table 8, attendee departures from the weekend public show to Manhattan were substantially higher than attendee arrivals from Manhattan. This variation can be explained by the large percentage of attendees that went sightseeing or to restaurants following the event (this is illustrated by Table 9, which lists the pre- and post- event activities of Convention Center attendees, exhibitors, and event staff). In contrast, most trip destinations of exhibitors in the weekend public show were consistent with their origins. For the weekday trade shows, there were only slightly more attendees and

⁵ Assuming 250 square feet of floor space per office employee.

⁶ *Jacob K. Javits Convention Center Expansion Study*, Technical Memorandum Travel Surveys, Eng-Wong Taub & Associates, May 15, 2003

⁷ These workers included cleaning service personnel, food service personnel, and carpenters.



PB Team

NYCT – Number 7 Extension Project
2 Broadway-5th Floor, Mailbox 519
New York, NY 10004
Fax: 646-252-2063

exhibitors with Manhattan destinations compared to origins, as most trips occurred between homes, hotels, and offices. It should be noted that Table 8 does not include separate origins and destinations for event staff; the arrival and departure activities of event staff listed in Table 9 are generally the same and predominantly involve trips to/from homes.

Temporal Distributions

Table 10 summarizes existing temporal distribution patterns based on the EWT surveys for both the weekend public show and the weekday trade shows. As shown in Table 10, temporal distributions for attendees, exhibitors, and event staff were obtained from interviews; overall temporal distributions for all users were obtained from door counts. The overall temporal distributions correlate well with the temporal distributions of attendees; attendees accounted for 99.3% of the total visitors (the remaining 0.7% were exhibitors) at the public show and attendees accounted for 81.4% of the total visitors (18.6% were exhibitors) at weekday trade shows⁸. The overall temporal distributions for the weekend public show and weekday trade shows are plotted in Figure 5. This figure indicates that the temporal distributions for the weekend public show tended to peak during the 3-5 PM period, while trips associated with the weekday trade shows are more evenly spread over the course of the day.

To verify that the surveyed temporal distributions were representative of typical public and trade shows at the Convention Center, the starting and ending times of all events in 1999 were reviewed. Weekday trade shows typically start at 9 AM or 10 AM and end at 4 PM, 5 PM, or 6 PM (it is not uncommon for a combination of simultaneous events to start/end at different times). Similarly, most weekend public shows start between 8 AM and 10 AM and end at 5 PM or 6 PM.

The analysis of travel demand associated with Convention Center trade shows will focus on the weekday 8-9 AM, 12-1 PM, and 5-6 PM periods. As shown in Figure 5, these time periods generally correlate with the peaks in the weekday overall temporal distributions at the Convention Center.⁹ These peak periods also represent the worst-case scenario for the combined effects of incremental travel demand associated with the Convention Center and primary land use components of the adjacent Hudson Yards development (e.g. office, residential, and hotel) when applied to the existing peak periods of background traffic volumes.

For analysis purposes, projected trips to/from the Convention Center will be calculated separately for attendees, exhibitors, and event staff based on the temporal distributions obtained from the EWT interviews (also shown in Table 10). This methodology will allow for a more accurate projection of overall trips to the Convention Center because characteristics such as origin/destinations, travel modes, and average vehicle occupancy vary among the different types of visitors and employees. As a conservative measure, the sharp peak in departures of exhibitors from the weekday trade shows during the 6-7 PM period (a temporal distribution of 30.1%) will be assumed to occur during the 5-6 PM peak hour (in place of a temporal distribution of 5.4%.)

It was determined that the worst-case scenario for weekend trips would result from a combination of trips from the Convention Center and arrivals or departures from a Sunday

⁸ The split between attendees and exhibitors at the surveyed events was provided by Convention Center management.

⁹ The review of 1999 Convention Center event starting times indicated that a greater number of weekday trade shows begin at 10 AM compared to 9 AM. For this reason, it is logical for weekday arrivals to the Convention Center to be concentrated during the 9-10 AM period.

**Table 8: Regional Origins and Destinations of
Convention Center Attendees, Exhibitors, and Event Staff**

WEEKEND PUBLIC SHOW

Region	Attendees		Exhibitors		Event Staff
	Origin	Destination	Origin	Destination	Origin/Destination
Staten Island	2.5%	1.6%	2.2%	1.7%	0.0%
Manhattan	12.5%	43.7%	48.1%	48.6%	22.2%
Bronx	6.7%	3.8%	3.8%	2.8%	24.4%
Brooklyn	15.2%	9.8%	23.5%	22.9%	22.2%
Queens	19.0%	12.2%	3.8%	5.6%	22.2%
Long Island	7.1%	4.0%	1.6%	1.7%	4.4%
Westchester and Upstate (East of Hudson)	5.8%	3.6%	1.6%	1.7%	0.0%
Rockland and Upstate (West of Hudson)	2.8%	1.9%	1.1%	1.7%	2.2%
Northern New Jersey	21.2%	14.7%	13.1%	11.7%	2.2%
Southern New Jersey	1.3%	0.8%	0.0%	1.1%	0.0%
Connecticut and New England	5.8%	4.0%	1.1%	0.6%	0.0%
Totals	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Eng-Wong Taub & Associates, 2003

WEEKDAY TRADE SHOWS

Region	Attendees		Exhibitors		Event Staff
	Origin	Destination	Origin	Destination	Origin/Destination
Staten Island	0.5%	0.0%	0.3%	0.0%	15.2%
Manhattan	60.5%	68.6%	71.4%	76.2%	9.1%
Bronx	1.0%	0.8%	0.0%	0.0%	9.1%
Brooklyn	5.1%	3.6%	1.3%	1.4%	21.2%
Queens	9.1%	8.8%	5.9%	4.8%	12.1%
Long Island	2.7%	1.5%	2.0%	1.7%	6.1%
Westchester and Upstate (East of Hudson)	2.9%	2.6%	2.3%	2.4%	3.0%
Rockland and Upstate (West of Hudson)	2.7%	1.8%	1.6%	1.7%	9.1%
Northern New Jersey	10.8%	9.0%	11.9%	8.3%	15.2%
Southern New Jersey	1.2%	0.5%	0.6%	1.0%	0.0%
Connecticut and New England	3.4%	2.8%	2.6%	2.4%	0.0%
Totals	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Eng-Wong Taub & Associates, 2003

**Table 9: Pre- and Post- Event Activities of
Convention Center Attendees, Exhibitors, and Event Staff**

WEEKEND PUBLIC SHOW

Activity	Attendees		Exhibitors		Event Staff	
	Arrival	Departure	Arrival	Departure	Arrival	Departure
Home	95%	58%	53%	40%	96%	96%
Work	1%	1%	0%	2%	4%	4%
Hotel	1%	0%	41%	38%	0%	0%
Restaurant	0%	24%	0%	2%	0%	0%
Sightseeing	0%	8%	0%	12%	0%	0%
Other	3%	9%	5%	7%	0%	0%
Total	100%	100%	100%	100%	100%	100%

Source: Eng-Wong Taub & Associates, 2003

WEEKDAY TRADE SHOWS

Activity	Attendees		Exhibitors		Event Staff	
	Arrival	Departure	Arrival	Departure	Arrival	Departure
Home	37%	32%	24%	20%	100%	100%
Work	18%	14%	7%	9%	0%	0%
Hotel	36%	26%	61%	53%	0%	0%
Restaurant	0%	10%	0%	12%	0%	0%
Sightseeing	0%	3%	0%	1%	0%	0%
Other	7%	16%	8%	6%	0%	0%
Total	100%	100%	100%	100%	100%	100%

Source: Eng-Wong Taub & Associates, 2003

Table 10: Temporal Distributions from 2003 Convention Center Surveys

Time Period	WEEKEND PUBLIC SHOW											
	Attendees			Exhibitors			Event Staff			Manual Door Counts		
	In	Out	Temporal Distribution	In	Out	Temporal Distribution	In	Out	Temporal Distribution	In	Out	Temporal Distribution
12:00 AM - 1:00 AM												
1:00 AM - 2:00 AM												
2:00 AM - 3:00 AM												
3:00 AM - 4:00 AM												
4:00 AM - 5:00 AM												
5:00 AM - 6:00 AM												
6:00 AM - 7:00 AM												
7:00 AM - 8:00 AM												
8:00 AM - 9:00 AM												
9:00 AM - 10:00 AM	100%	0%	0.8%	0%	0%	0.8%	0%	0%	0.8%	0%	0%	0.1%
10:00 AM - 11:00 AM	98%	2%	7.8%	66%	34%	0.8%	100%	0%	1.1%	96%	4%	3.8%
11:00 AM - 12:00 PM	81%	19%	8.7%	0%	100%	0.3%	47%	53%	2.3%	86%	14%	5.6%
12:00 PM - 1:00 PM	68%	32%	8.6%	0%	100%	0.3%				71%	29%	8.9%
1:00 PM - 2:00 PM	57%	43%	9.0%	0%	100%	0.3%				64%	36%	12.0%
2:00 PM - 3:00 PM	45%	55%	11.5%	0%	100%	1.1%				52%	48%	13.1%
3:00 PM - 4:00 PM	48%	52%	12.2%	0%	100%	1.9%	18%	82%	5.8%	50%	50%	14.4%
4:00 PM - 5:00 PM	52%	48%	13.0%	0%	100%	1.9%	0%	100%	11.9%	41%	59%	13.8%
5:00 PM - 6:00 PM	36%	64%	13.0%	0%	100%	12.5%	0%	100%	1.2%	31%	69%	12.0%
6:00 PM - 7:00 PM	5%	95%	15.2%	0%	100%	5.8%	0%	100%	9.5%	14%	86%	10.4%
7:00 PM - 8:00 PM				0%	100%	8.9%				5%	95%	4.6%
8:00 PM - 9:00 PM				0%	100%	6.1%	0%	100%	1.2%			
9:00 PM - 10:00 PM				0%	100%	2.8%						
10:00 PM - 11:00 PM				0%	100%	2.8%						
11:00 PM - 12:00 AM				0%	100%	3.8%	0%	100%	1.2%			
Totals			100.0%			100.0%			100.0%			100.0%

Source: Eng-Wong Trails & Associates (2003)

WEEKDAY TRADE SHOWS

Time Period	WEEKDAY TRADE SHOWS											
	Attendees			Exhibitors			Event Staff			Manual Door Counts		
	In	Out	Temporal Distribution	In	Out	Temporal Distribution	In	Out	Temporal Distribution	In	Out	Temporal Distribution
12:00 AM - 1:00 AM												
1:00 AM - 2:00 AM												
2:00 AM - 3:00 AM												
3:00 AM - 4:00 AM												
4:00 AM - 5:00 AM												
5:00 AM - 6:00 AM												
6:00 AM - 7:00 AM												
7:00 AM - 8:00 AM	100%	0%	1.0%	0%	0%	4.0%	100%	0%	1.5%	91%	9%	0.7%
8:00 AM - 9:00 AM	100%	0%	5.5%	100%	0%	11.6%	100%	0%	18.7%	95%	5%	6.3%
9:00 AM - 10:00 AM	100%	0%	8.3%	94%	6%	5.3%	100%	0%	9%	91%	9%	10.5%
10:00 AM - 11:00 AM	97%	3%	13.4%	83%	17%	7.6%	100%	0%	1.2%	84%	16%	8.3%
11:00 AM - 12:00 PM	93%	7%	6.9%	89%	11%	2.9%	100%	0%	0%	72%	28%	7.7%
12:00 PM - 1:00 PM	73%	27%	7.1%	34%	66%	1.5%	100%	0%	4.5%	55%	45%	9.1%
1:00 PM - 2:00 PM	54%	46%	4.9%	43%	51%	1.0%	100%	0%	4.5%	53%	47%	9.5%
2:00 PM - 3:00 PM	44%	56%	9.3%	33%	67%	1.0%	100%	0%	1.5%	46%	54%	9.5%
3:00 PM - 4:00 PM	20%	80%	7.7%	83%	17%	3.8%	100%	0%	25.8%	37%	63%	8.8%
4:00 PM - 5:00 PM	16%	84%	10.7%	5%	95%	3.1%	100%	0%	9.1%	32%	68%	9.2%
5:00 PM - 6:00 PM	3%	97%	12.7%	0%	100%	5.4%	83%	17%	9.1%	15%	85%	10.5%
6:00 PM - 7:00 PM	1%	99%	11.7%	0%	100%	2.5%				5%	95%	9.9%
7:00 PM - 8:00 PM	0%	100%	0.6%	0%	100%	1.2%						
8:00 PM - 9:00 PM	0%	100%	0.1%	0%	100%	0.3%						
9:00 PM - 10:00 PM				0%	100%	0.3%						
10:00 PM - 11:00 PM												
11:00 PM - 12:00 AM												
Totals			100.0%			100.0%			100.0%			100.0%

Source: Eng-Wong Trails & Associates (2003)



PB Team

NYCT – Number 7 Extension Project
2 Broadway-5th Floor, Mailbox 519
New York, NY 10004
Fax: 646-252-2063

afternoon football game at the proposed adjacent multi-use facility. The four peak periods generated by the proposed multi-use facility would be:

- 12-1 PM (arrivals associated with a 1 PM football game);
- 3-4 PM (arrivals associated with the 4 PM football game);
- 4-5 PM (departures associated with a 1 PM football game); and
- 7-8 PM (departures associated with a 4 PM football game).

As evidenced in Figure 5, the 12-1 PM and 7-8 PM time periods would not constitute the worst-case scenarios given the significantly lower temporal distributions of Convention Center trips during these time periods compared its 3-4 PM peak hour. According to travel forecast projections for the multi-use facility, that post-game departures would be substantially more peaked than pre-game arrivals; there would be approximately 9,000 more total person trips during the 4-5 PM period compared to the 3-4 PM period.¹⁰ Although the overall door counts at the Convention Center showed a slightly higher temporal distribution of trips from 3-4 PM (14.4%) compared to 4-5 PM (13.8%), a preliminary trip generation analysis of incremental travel demand calculated separately for attendees, exhibitors, and event staff (using the data from Tables 5, 7, and 10) shows that there would be approximately 400 more total person trips during the 4-5 PM period compared to the 3-4 PM period. Therefore, since both the proposed Convention Center expansion and the proposed multi-use facility would generate a greater amount of trips during the 4-5 PM period compared to the 3-4 PM period, the 4-5 PM period has been selected as the worst-case scenario for analysis.

Existing Modal Splits

Separate modal splits will be utilized to forecast travel demand associated with Convention Center attendees, exhibitors, and event staff, akin to the method that will be used for temporal distributions. The EWT surveys included separate arrival and departure modal splits due to the tendency for people to arrive by one mode of travel and leave by another. Tables 11 and 12 show existing arrival/departure modal splits by region for the weekend public show and the weekday trade shows, respectively. These tables also include the weighted average modal splits, which were calculated by applying the respective origins and destinations (listed in Table 8) to the regional modal splits. Although slight differences in modal splits were observed for arrivals and departures (such as an increase in departures by the walk mode and a decrease in departures by the taxi mode), the variations in the weighted average modal splits for arrivals and departures are primarily a function of the increased amount of Manhattan destinations compared to origins. It should be noted that separate arrival and departure modal splits by region were not included for event staff because they were nearly identical. Based on the results of the EWT travel surveys, the traffic assignments for auto trips will include the following percentages of passengers being dropped off adjacent to the Convention Center:

- 4% of auto trips for attendees at the weekend public show;
- 2% of auto trips for exhibitors at the weekend public show; and
- 6% of auto trips for both attendees and exhibitors at the weekday trade shows.

Projected Modal Splits with the No. 7 Subway Extension

The existing modal splits obtained from the EWT surveys will be utilized to project incremental travel demand in the 2010 condition with only the Convention Center expansion. In order to forecast future travel patterns for the 2010 condition with the proposed action (which includes the No. 7 subway extension), several assumptions were made to reflect the increased access to transit services. It is anticipated that 34% of both the existing auto and taxi users would shift to

¹⁰ This projection was included as part of the Multi-Use Facility Transportation Planning Assumptions Technical Memorandum (October 10, 2003).

Figure 5: Overall Temporal Distributions of Arrivals/Departures to Convention Center

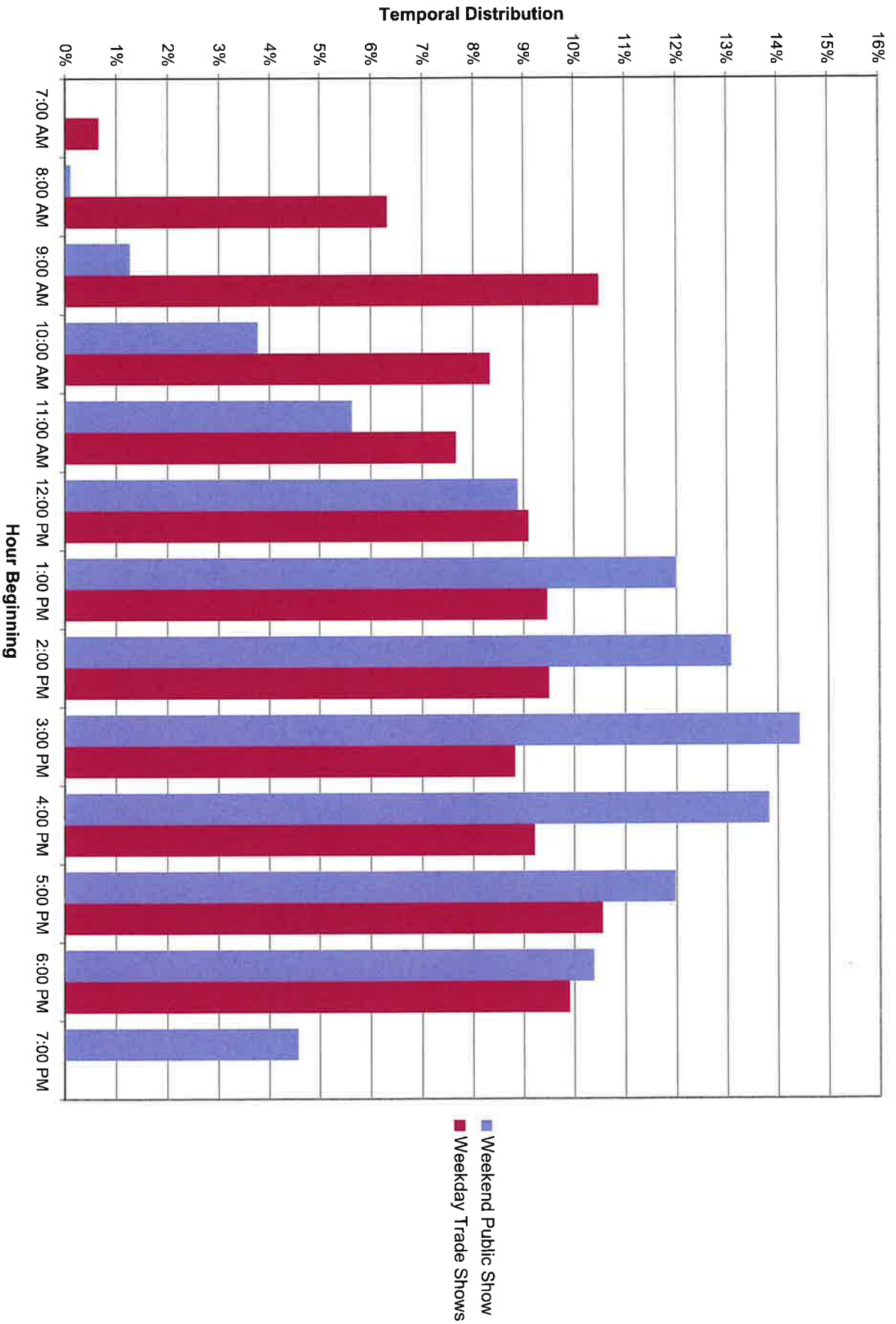


Table 11: 2003 Existing Convention Center Modal Splits for Weekend Public Show

PART A: ATTENDEE ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	64.7%									29.4%	-			5.9%			100.0%
Manhattan	27.4%	26.2%								20.2%	-	3.6%				21.4%	100.0%
Brooklyn	41.2%	2.0%								52.9%	-	3.9%					100.0%
Bronx	60.0%									40.0%	-						100.0%
Queens	51.6%	0.8%			0.8%	10.2%				33.6%	-	2.3%		0.8%			100.0%
Long Island	52.1%					47.9%					-						100.0%
Westchester and Upstate (East of Hudson)	65.9%						34.1%				-						100.0%
Rockland and Upstate (West of Hudson)	69.2%	7.7%		7.7%				15.4%			-						100.0%
Northern New Jersey	59.2%	2.1%		1.4%				12.7%	15.5%		-		4.2%		4.9%		100.0%
Southern New Jersey	44.4%							33.3%	22.2%		-						100.0%
Connecticut and New England	60.5%	2.3%					32.6%	4.7%			-						100.0%
Weighted Average	52.9%	4.3%	0.0%	0.5%	0.1%	5.3%	3.9%	3.8%	3.6%	19.3%	-	1.2%	0.9%	0.4%	1.0%	2.7%	100.0%

PART B: ATTENDEE DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	80.0%									10.0%	-			10.0%			100.0%
Manhattan	28.0%	12.2%								11.0%	-	0.8%		0.4%		47.6%	100.0%
Brooklyn	45.2%	1.6%								51.6%	-	1.6%					100.0%
Bronx	66.7%									33.3%	-						100.0%
Queens	49.4%	2.6%				11.7%				33.8%	-	2.6%					100.0%
Long Island	53.8%					46.2%					-						100.0%
Westchester and Upstate (East of Hudson)	66.7%						33.3%				-						100.0%
Rockland and Upstate (West of Hudson)	80.0%			10.0%				10.0%			-						100.0%
Northern New Jersey	54.3%	2.2%		2.2%	3.3%			12.0%	16.3%		-		2.2%		7.6%		100.0%
Southern New Jersey	40.0%							40.0%	20.0%		-						100.0%
Connecticut and New England	67.9%						26.6%	3.6%			-						100.0%
Weighted Average	44.8%	6.0%	0.0%	0.5%	0.5%	3.2%	2.3%	2.4%	2.6%	14.3%	-	0.7%	0.3%	0.3%	1.1%	20.8%	100.0%

PART C: EXHIBITOR ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	100.0%										-						100.0%
Manhattan	3.4%	61.4%								9.1%	-					26.1%	100.0%
Brooklyn	30.2%		55.6%							11.6%	-	2.3%					100.0%
Bronx	28.6%									28.6%	-	28.6%		14.3%			100.0%
Queens	42.9%	14.3%								14.3%	-	28.6%					100.0%
Long Island	33.3%					66.7%					-						100.0%
Westchester and Upstate (East of Hudson)	75.0%						25.0%				-						100.0%
Rockland and Upstate (West of Hudson)	100.0%										-						100.0%
Northern New Jersey	62.5%			4.2%				4.2%	8.3%		-				20.8%		100.0%
Southern New Jersey	100.0%										-						100.0%
Connecticut and New England	100.0%										-	7.9%	0.9%	3.4%	2.7%	12.6%	100.0%
Weighted Average	25.5%	30.1%	2.1%	0.5%	0.0%	1.1%	0.4%	0.5%	1.1%	12.1%	-	7.9%	0.9%	3.4%	2.7%	12.6%	100.0%

PART D: EXHIBITOR DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	100.0%										-						100.0%
Manhattan		54.0%								9.2%	-	2.3%				34.5%	100.0%
Brooklyn	26.8%		56.5%							12.2%	-	2.4%					100.0%
Bronx	20.0%									20.0%	-	40.0%		20.0%			100.0%
Queens	60.0%	20.0%				10.0%					-	10.0%					100.0%
Long Island	33.3%					66.7%					-						100.0%
Westchester and Upstate (East of Hudson)	75.0%						25.0%				-						100.0%
Rockland and Upstate (West of Hudson)	100.0%										-						100.0%
Northern New Jersey	66.7%							4.8%	9.5%		-				19.0%		100.0%
Southern New Jersey	50.0%			50.0%							-						100.0%
Connecticut and New England	100.0%										-						100.0%
Weighted Average	22.8%	27.4%	1.6%	0.6%	0.0%	1.7%	0.4%	0.6%	1.1%	9.4%	-	10.9%	0.0%	4.6%	2.2%	16.8%	100.0%

PART E: EVENT STAFF ARRIVAL/DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	100.0%										-						100.0%
Manhattan										42.9%	-	50.0%		7.1%			100.0%
Brooklyn	10.0%									30.0%	-	60.0%					100.0%
Bronx	55.6%										-	44.4%					100.0%
Queens	10.0%					20.0%				20.0%	-	50.0%					100.0%
Long Island						100.0%					-						100.0%
Westchester and Upstate (East of Hudson)	100.0%										-						100.0%
Rockland and Upstate (West of Hudson)	100.0%										-						100.0%
Northern New Jersey											-				100.0%		100.0%
Southern New Jersey	100.0%										-						100.0%
Connecticut and New England	100.0%										-						100.0%
Weighted Average	19.2%	0.0%	0.0%	0.0%	0.0%	8.9%	0.0%	0.0%	0.0%	21.3%	-	46.8%	0.0%	1.6%	2.2%	0.0%	100.0%

Source: Eng-Wong Taub & Associates, 2003

Table 12: 2003 Existing Convention Center Modal Splits for Weekday Trade Shows

PART A: ATTENDEE ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	100.0%																100.0%
Manhattan	2.0%	51.8%		0.8%	11.3%				0.4%	7.3%		4.0%		7.3%		15.0%	100.0%
Brooklyn	28.6%	4.8%								42.9%		23.8%					100.0%
Bronx							25.0%			25.0%		50.0%					100.0%
Queens	21.2%	21.2%				21.2%				27.3%		9.1%					100.0%
Long Island	36.4%	9.1%			9.1%	45.5%											100.0%
Westchester and Upstate (East of Hudson)	58.3%						41.7%										100.0%
Rockland and Upstate (West of Hudson)	40.0%	10.0%	10.0%					30.0%	10.0%								100.0%
Northern New Jersey	40.9%	9.1%	2.3%	2.3%				9.1%	20.5%				9.1%			6.8%	100.0%
Southern New Jersey	60.0%							20.0%								20.0%	100.0%
Connecticut and New England	47.6%			19.0%			19.0%	14.3%									100.0%
Weighted Average	14.5%	34.8%	0.5%	1.4%	7.1%	3.1%	3.2%	2.5%	2.7%	8.6%	-	6.1%	1.0%	4.4%	1.0%	9.1%	100.0%

PART B: ATTENDEE DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	100.0%																100.0%
Manhattan	4.5%	47.3%		0.8%	15.9%				0.4%	4.2%		3.0%		4.9%		18.9%	100.0%
Brooklyn	21.4%	7.1%								42.9%		28.6%					100.0%
Bronx							33.3%					66.7%					100.0%
Queens	18.8%	21.9%			12.5%	50.0%				31.3%		12.5%		3.1%			100.0%
Long Island	37.5%				12.5%	50.0%											100.0%
Westchester and Upstate (East of Hudson)	70.0%						30.0%										100.0%
Rockland and Upstate (West of Hudson)	40.0%		20.0%					40.0%									100.0%
Northern New Jersey	40.0%		2.9%	2.9%				17.1%	28.6%				2.9%		2.9%		100.0%
Southern New Jersey	100.0%																100.0%
Connecticut and New England	50.0%			22.2%			16.7%	11.1%									100.0%
Weighted Average	13.6%	34.4%	0.6%	1.4%	11.4%	1.9%	2.4%	2.6%	2.8%	5.9%	-	5.8%	0.3%	3.6%	0.3%	13.0%	100.0%

PART C: EXHIBITOR ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	100.0%				100.0%												100.0%
Manhattan	3.2%	63.0%			16.2%				0.5%	3.7%		0.5%		0.9%		12.0%	100.0%
Brooklyn	25.0%	7.1%								75.0%							100.0%
Bronx	100.0%																100.0%
Queens	11.8%	47.1%			5.9%									11.8%		5.9%	100.0%
Long Island						83.3%						16.7%					100.0%
Westchester and Upstate (East of Hudson)	57.1%						42.9%										100.0%
Rockland and Upstate (West of Hudson)	50.0%							50.0%									100.0%
Northern New Jersey	35.1%	16.2%			2.7%			10.8%	21.6%				2.7%		10.6%		100.0%
Southern New Jersey	50.0%							50.0%									100.0%
Connecticut and New England	60.0%						30.0%	10.0%									100.0%
Weighted Average	12.5%	49.7%	0.0%	0.0%	12.6%	1.6%	1.8%	2.7%	2.9%	3.7%	-	0.7%	0.3%	1.4%	1.3%	8.9%	100.0%

PART D: EXHIBITOR DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	100.0%				100.0%												100.0%
Manhattan	7.7%	50.0%			20.5%				1.8%					2.7%		17.3%	100.0%
Brooklyn	25.0%									75.0%							100.0%
Bronx	100.0%																100.0%
Queens	15.4%	53.8%				7.7%				15.4%				7.7%			100.0%
Long Island	20.0%					80.0%											100.0%
Westchester and Upstate (East of Hudson)	57.1%						42.9%										100.0%
Rockland and Upstate (West of Hudson)	20.0%			20.0%	20.0%			40.0%									100.0%
Northern New Jersey	37.5%	8.3%			4.2%			16.7%	16.7%				4.2%		12.5%		100.0%
Southern New Jersey	33.3%							33.3%	33.3%								100.0%
Connecticut and New England	37.5%						50.0%	12.5%									100.0%
Weighted Average	14.4%	41.4%	0.0%	0.3%	16.3%	1.8%	2.2%	2.7%	1.7%	2.1%	-	0.0%	0.3%	2.4%	1.0%	13.2%	100.0%

PART E: EVENT STAFF ARRIVAL/DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	20.0%									40.0%		40.0%					100.0%
Manhattan										66.7%						33.3%	100.0%
Brooklyn	26.6%									14.3%		57.1%					100.0%
Bronx										33.3%		33.3%		33.3%			100.0%
Queens	25.0%					25.0%											100.0%
Long Island	50.0%					50.0%				50.0%							100.0%
Westchester and Upstate (East of Hudson)	100.0%																100.0%
Rockland and Upstate (West of Hudson)	100.0%																100.0%
Northern New Jersey	60.0%														40.0%		100.0%
Southern New Jersey	100.0%																100.0%
Connecticut and New England	100.0%																100.0%
Weighted Average	32.9%	0.0%	0.0%	0.0%	0.0%	6.1%	0.0%	0.6%	0.0%	26.6%	-	18.3%	0.0%	7.1%	6.1%	3.0%	100.0%

Source: Eng-Wong Taub & Associates, 2003



PB Team

NYCT – Number 7 Extension Project
2 Broadway-5th Floor, Mailbox 519
New York, NY 10004
Fax: 646-252-2063

the extended No. 7 subway line¹¹. This primary assumption is based on the ratio of auto modal splits from 1990 US Census reverse journey-to-work data in the Convention Center and Hudson Yards Development area (16.3%) compared to the Midtown Manhattan area (10.7%)¹². It was also assumed that other types of existing transit trips destined for the Convention Center would be diverted to the No. 7 subway extension, including all Metro-North riders (which would switch to the No. 7 line at Grand Central Terminal), approximately half of the subway riders (which would switch to the No. 7 line at the Times Square, Fifth Avenue, and Grand Central stations), and approximately half of bus riders (including subway riders that currently transfer to the M34 or M42 buses). Tables 13 and 14 show projected 2010 arrival/departure modal splits by region with the No. 7 subway extension for the weekend public show and the weekday trade shows, respectively.

Because the LIRR East Side Access project is not expected to be completed until 2012, it will not be included as part of the 2010 analyses. Without LIRR access to Grand Central Terminal, it is assumed that all LIRR riders would continue to travel to/from Penn Station. However, for the 2025 condition with the proposed action (including the No. 7 subway extension), it is assumed that a portion of LIRR riders that currently use Penn Station would instead travel to Grand Central Terminal and utilize the No. 7 subway extension for direct access to the Convention Center. For the weekend public show, it is assumed that approximately 50% of LIRR riders would utilize the No. 7 line; for the weekday trade shows, it is assumed that approximately 40% of LIRR riders would utilize the No. 7 line¹³. Tables 15 and 16 show projected 2025 arrival/departure modal splits by region with both the No. 7 subway extension and LIRR East Side Access project, for the weekend public show and weekday trade shows, respectively.

Vehicle Occupancy

Table 17 shows the vehicle occupancies that will be utilized for attendees, exhibitors, and event staff for the weekend public show and weekday trade shows. The vehicle occupancies in Table 17 are based on the results of the EWT surveys.

Truck Trip Generation and Marshalling

The proposed Convention Center expansion would generate additional truck trips and require added space for truck marshalling. As part of the expansion, a new marshalling facility is proposed to be constructed in the area of the existing marshalling yard, on the block bounded by Eleventh Avenue, Route 9A (Twelfth Avenue), West 33rd Street, and West 34th Street. Arriving trucks would enter the marshalling facility from Route 9A, where they would be processed, security screened, and directed to a specific waiting space or available loading dock. Trucks would proceed from the marshalling facility to the two levels of loading docks via an underground tunnel that would run beneath Eleventh Avenue and West 41st Street. This particular truck circulation pattern would be entirely contained within the marshalling facility and would not utilize local streets. Some trucks would also be able to utilize the existing truck queuing lane along Route 9A between West 34th and West 39th Streets, from which they could enter both levels of loading docks via an entrance on West 41st Street. All departing trucks

¹¹ As an example, taxi usage from Metro-North riders at Grand Central Terminal and visitors from Midtown Manhattan hotels would be expected to decrease.

¹² This methodology was agreed to at the July 17, 2003 transportation committee meeting and was also used to project future modal splits with the extended No. 7 subway line in the Office Trip Generation Transportation Planning Assumptions Technical Memorandum. The Midtown Manhattan area is defined as the area bordered by 59th Street on the north, 23rd Street on the south, Third Avenue on the east, and Eighth Avenue on the west; reverse journey-to-work data was computed for the 7:30-9:30 AM period.

¹³ Assumptions for LIRR diversions are based on the projected LIRR operating plan with the East Side Access project, which was discussed during the September 11, 2003 transportation committee meeting.

Table 13: 2010 Projected Convention Center Modal Splits for Weekend Public Show

PART A: ATTENDEE ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferris	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	42.7%									14.7%	36.6%			2.9%			100.0%
Manhattan	18.1%	17.3%								10.1%	30.7%	1.6%		0.6%		21.4%	100.0%
Brooklyn	27.2%	1.3%								26.5%	43.1%	2.0%					100.0%
Bronx	39.6%									20.0%	40.4%						100.0%
Queens	34.0%	0.5%			0.8%	10.2%				16.8%	36.2%	1.2%		0.4%			100.0%
Long Island	34.4%					47.9%					17.7%						100.0%
Westchester and Upstate (East of Hudson)	43.5%										56.5%						100.0%
Rockland and Upstate (West of Hudson)	45.7%	5.1%		7.7%				15.4%			26.2%						100.0%
Northern New Jersey	39.0%	1.4%		1.4%				12.7%	15.5%				4.2%		4.9%		100.0%
Southern New Jersey	29.3%							33.3%	22.2%								100.0%
Connecticut and New England	35.9%	1.5%						4.7%			53.9%						100.0%
Weighted Average	34.9%	2.9%	0.0%	0.5%	0.1%	5.3%	0.0%	3.8%	3.6%	9.6%	33.7%	0.6%	0.9%	0.2%	1.9%	2.7%	100.0%

PART B: ATTENDEE DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferris	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	52.8%									5.0%	37.2%			5.0%			100.0%
Manhattan	18.4%	8.1%								5.5%	19.8%	0.4%		0.2%		47.6%	100.0%
Brooklyn	29.8%	1.1%								25.8%	42.5%	0.8%					100.0%
Bronx	44.0%									16.7%	39.3%						100.0%
Queens	32.6%	1.7%				11.7%				16.9%	35.8%	1.3%					100.0%
Long Island	35.5%					46.2%					18.3%						100.0%
Westchester and Upstate (East of Hudson)	44.0%										56.0%						100.0%
Rockland and Upstate (West of Hudson)	52.8%			10.0%				10.0%			27.2%						100.0%
Northern New Jersey	35.9%	1.4%			3.3%			12.0%	16.3%				2.2%		7.6%		100.0%
Southern New Jersey	26.4%							40.0%	20.0%								100.0%
Connecticut and New England	44.8%							3.6%			51.6%						100.0%
Weighted Average	29.6%	4.0%	0.0%	0.5%	0.5%	3.2%	0.0%	2.4%	2.6%	7.2%	27.3%	0.4%	0.3%	0.2%	1.1%	20.8%	100.0%

PART C: EXHIBITOR ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferris	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	66.0%										34.0%						100.0%
Manhattan	2.3%	40.5%								4.5%	26.6%					26.1%	100.0%
Brooklyn	20.0%		55.8%							5.8%	17.3%	1.2%					100.0%
Bronx	18.9%									14.3%	45.4%	14.3%		7.1%			100.0%
Queens	28.3%	9.4%								7.1%	40.9%	14.3%					100.0%
Long Island	22.0%					66.7%					11.3%						100.0%
Westchester and Upstate (East of Hudson)	49.5%										50.5%						100.0%
Rockland and Upstate (West of Hudson)	66.0%										34.0%						100.0%
Northern New Jersey	41.3%			4.2%				4.2%	8.3%		21.3%				20.8%		100.0%
Southern New Jersey	66.0%										34.0%						100.0%
Connecticut and New England	66.0%										34.0%						100.0%
Weighted Average	18.8%	19.8%	2.1%	0.5%	0.0%	1.1%	0.0%	0.5%	1.1%	6.0%	31.0%	3.9%	0.0%	1.7%	2.7%	12.6%	100.0%

PART D: EXHIBITOR DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferris	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	66.0%										34.0%						100.0%
Manhattan		35.7%								4.6%	24.1%	1.1%				34.5%	100.0%
Brooklyn	17.7%		58.5%							6.1%	16.4%	1.2%					100.0%
Bronx	13.2%									10.0%	46.8%	20.0%		10.0%			100.0%
Queens	39.6%	13.2%				10.0%					32.2%	5.0%					100.0%
Long Island	22.0%					66.7%					11.3%						100.0%
Westchester and Upstate (East of Hudson)	49.5%										50.5%						100.0%
Rockland and Upstate (West of Hudson)	66.0%										34.0%						100.0%
Northern New Jersey	44.0%							4.8%	9.5%		22.7%				19.0%		100.0%
Southern New Jersey	33.0%			50.0%							17.0%						100.0%
Connecticut and New England	66.0%										34.0%						100.0%
Weighted Average	15.0%	18.1%	1.6%	0.6%	0.0%	1.7%	0.0%	0.6%	1.1%	4.7%	28.9%	5.5%	0.0%	2.3%	2.2%	16.8%	100.0%

PART E: EVENT STAFF ARRIVAL/DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferris	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	66.0%										34.0%						100.0%
Manhattan										21.4%	50.0%	25.0%		3.6%			100.0%
Brooklyn	6.6%									15.0%	48.4%	30.0%					100.0%
Bronx	36.7%										41.1%	22.2%					100.0%
Queens	6.6%					20.0%				10.0%	38.4%	25.0%					100.0%
Long Island						100.0%											100.0%
Westchester and Upstate (East of Hudson)	66.0%										34.0%						100.0%
Rockland and Upstate (West of Hudson)	66.0%										34.0%						100.0%
Northern New Jersey															100.0%		100.0%
Southern New Jersey	66.0%										34.0%						100.0%
Connecticut and New England	66.0%										34.0%						100.0%
Weighted Average	12.7%	0.0%	0.0%	0.0%	0.0%	8.9%	0.0%	0.0%	0.0%	10.7%	41.4%	23.4%	0.0%	0.8%	2.2%	0.0%	100.0%

Notes: Projections based on Eng-Wong Taub & Associates survey

Table 14: 2010 Projected Convention Center Modal Splits for Weekday Trade Shows

PART A: ATTENDEE ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	66.0%										34.0%						100.0%
Manhattan	1.3%	34.2%		0.6%	11.3%				0.4%	3.6%	26.2%	1.6%		5.5%		15.0%	100.0%
Brooklyn	18.9%	3.1%								21.4%	47.0%	9.5%					100.0%
Bronx										12.5%	67.5%	20.0%					100.0%
Queens	14.0%	14.0%				21.2%				15.6%	33.5%	3.8%					100.0%
Long Island	24.0%	6.0%			9.1%	45.5%					61.5%						100.0%
Westchester and Upstate (East of Hudson)	38.5%										17.0%						100.0%
Rockland and Upstate (West of Hudson)	26.4%	6.6%	10.0%					30.0%	10.0%		17.0%				6.8%		100.0%
Northern New Jersey	27.0%	6.0%	2.3%	2.3%				9.1%	20.5%		17.0%		9.1%				100.0%
Southern New Jersey	39.6%							20.0%			20.4%				20.0%		100.0%
Connecticut and New England	31.4%			19.0%				14.3%			35.2%						100.0%
Weighted Average	9.6%	23.0%	0.5%	1.4%	7.1%	3.1%	0.0%	2.5%	2.7%	4.3%	29.0%	2.4%	1.0%	3.3%	1.0%	9.1%	100.0%

PART B: ATTENDEE DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	66.0%										34.0%						100.0%
Manhattan	3.0%	31.3%		0.8%	15.9%				0.4%	2.1%	22.8%	1.2%		3.7%		18.9%	100.0%
Brooklyn	14.1%	4.7%								21.4%	48.3%	11.4%					100.0%
Bronx											73.3%	26.7%					100.0%
Queens	12.4%	14.4%				12.5%				15.6%	37.7%	5.0%		2.3%			100.0%
Long Island	24.8%				12.5%	50.0%					12.8%						100.0%
Westchester and Upstate (East of Hudson)	46.2%										53.8%						100.0%
Rockland and Upstate (West of Hudson)	26.4%		20.0%					40.0%			13.6%						100.0%
Northern New Jersey	26.4%		2.9%	2.9%				17.1%	28.6%		13.6%		2.9%		2.9%		100.0%
Southern New Jersey	66.0%										34.0%						100.0%
Connecticut and New England	33.0%			22.2%				11.1%			33.7%						100.0%
Weighted Average	9.0%	22.7%	0.6%	1.4%	11.4%	1.9%	0.0%	2.8%	2.8%	3.0%	26.1%	2.3%	0.3%	2.7%	0.3%	13.0%	100.0%

PART C: EXHIBITOR ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island					100.0%												100.0%
Manhattan	2.1%	41.6%			16.2%				0.5%	1.9%	24.8%	0.2%		0.7%		12.0%	100.0%
Brooklyn	16.5%									37.5%	46.0%						100.0%
Bronx	66.0%										34.0%						100.0%
Queens	7.8%	31.1%			5.9%					8.8%	31.8%			8.8%		5.9%	100.0%
Long Island						83.3%						16.7%					100.0%
Westchester and Upstate (East of Hudson)	37.7%										62.3%						100.0%
Rockland and Upstate (West of Hudson)	33.0%							50.0%			17.0%						100.0%
Northern New Jersey	23.2%	10.7%			2.7%			10.8%	21.6%		17.5%		2.7%		10.6%		100.0%
Southern New Jersey	33.0%							50.0%			17.0%						100.0%
Connecticut and New England	39.6%							10.0%			50.4%						100.0%
Weighted Average	8.3%	32.6%	0.0%	0.0%	12.6%	1.6%	0.0%	2.7%	2.9%	1.8%	25.3%	0.5%	0.3%	1.0%	1.3%	8.9%	100.0%

PART D: EXHIBITOR DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island					100.0%												100.0%
Manhattan	5.1%	33.0%			20.5%					0.9%	21.2%			2.0%		17.3%	100.0%
Brooklyn	16.5%									37.5%	46.0%						100.0%
Bronx	66.0%										34.0%						100.0%
Queens	10.2%	35.5%				7.7%				7.7%	33.2%			5.8%			100.0%
Long Island	13.2%					80.0%					6.8%						100.0%
Westchester and Upstate (East of Hudson)	37.7%										62.3%						100.0%
Rockland and Upstate (West of Hudson)	13.2%			20.0%	20.0%			40.0%			6.8%						100.0%
Northern New Jersey	24.8%	5.5%			4.2%			16.7%	16.7%		15.6%		4.2%		12.5%		100.0%
Southern New Jersey	22.0%							33.3%	33.3%		11.3%						100.0%
Connecticut and New England	24.8%							12.5%			62.8%						100.0%
Weighted Average	9.5%	27.3%	0.0%	0.3%	16.3%	1.8%	0.0%	2.7%	1.7%	1.1%	22.9%	0.0%	0.3%	1.8%	1.0%	13.2%	100.0%

PART E: EVENT STAFF ARRIVAL/DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	13.2%									20.0%	46.8%	20.0%					100.0%
Manhattan										33.3%	33.3%					33.3%	100.0%
Brooklyn	18.9%									7.1%	45.4%	28.6%		25.0%			100.0%
Bronx										16.7%	41.7%	16.7%					100.0%
Queens	16.5%					25.0%				25.0%	33.5%						100.0%
Long Island	33.0%					50.0%					17.0%						100.0%
Westchester and Upstate (East of Hudson)	66.0%										34.0%						100.0%
Rockland and Upstate (West of Hudson)	66.0%										34.0%						100.0%
Northern New Jersey	39.6%										20.4%				40.0%		100.0%
Southern New Jersey	66.0%										34.0%						100.0%
Connecticut and New England	66.0%										34.0%						100.0%
Weighted Average	21.7%	0.0%	0.0%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%	13.3%	35.4%	9.2%	0.0%	5.3%	6.1%	3.0%	100.0%

Notes: Projections based on Eng-Wong Taub & Associates survey

Table 15: 2025 Projected Convention Center Modal Splits for Weekend Public Show

PART A: ATTENDEE ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	42.7%									14.7%	39.6%			2.9%			100.0%
Manhattan	18.1%	17.3%								10.1%	30.7%	1.8%		0.6%		21.4%	100.0%
Brooklyn	27.2%	1.3%								26.5%	43.1%	2.0%					100.0%
Bronx	39.6%									20.0%	40.4%						100.0%
Queens	34.0%	0.5%			0.8%	5.1%				16.8%	41.2%	1.2%		0.4%			100.0%
Long Island	34.4%					24.0%					41.7%						100.0%
Westchester and Upstate (East of Hudson)	43.5%										56.5%						100.0%
Rockland and Upstate (West of Hudson)	45.7%	5.1%		7.7%				15.4%			26.2%						100.0%
Northern New Jersey	39.0%	1.4%		1.4%				12.7%	15.5%		20.8%		4.2%		4.9%		100.0%
Southern New Jersey	29.3%							33.3%	22.2%		4.7%						100.0%
Connecticut and New England	39.9%	1.5%									53.9%						100.0%
Weighted Average	34.9%	2.9%	0.0%	0.5%	0.1%	2.7%	0.0%	3.8%	3.6%	9.6%	36.4%	0.6%	0.9%	0.2%	1.0%	2.7%	100.0%

PART B: ATTENDEE DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	52.8%									5.0%	37.2%			5.0%			100.0%
Manhattan	18.4%	8.1%								5.5%	18.8%	0.4%		0.2%		47.6%	100.0%
Brooklyn	29.8%	1.1%								25.8%	42.5%	0.8%					100.0%
Bronx	44.0%									15.7%	39.3%						100.0%
Queens	32.8%					5.8%				16.9%	41.7%	1.3%					100.0%
Long Island	35.5%	1.7%				23.1%					41.4%						100.0%
Westchester and Upstate (East of Hudson)	44.0%										56.0%						100.0%
Rockland and Upstate (West of Hudson)	52.8%			10.0%				10.0%			27.2%						100.0%
Northern New Jersey	35.9%	1.4%		2.2%	3.3%			12.0%	16.3%		19.2%		2.2%		7.6%		100.0%
Southern New Jersey	26.4%							40.0%	20.0%		13.6%						100.0%
Connecticut and New England	44.8%							3.6%			51.6%						100.0%
Weighted Average	29.6%	4.0%	0.0%	0.5%	0.5%	1.6%	0.0%	2.4%	2.6%	7.2%	28.9%	0.4%	0.3%	0.2%	1.1%	20.8%	100.0%

PART C: EXHIBITOR ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	85.0%										34.0%						100.0%
Manhattan	2.3%	40.5%								4.5%	26.6%					26.1%	100.0%
Brooklyn	20.0%		55.8%							5.8%	17.3%	1.2%					100.0%
Bronx	18.9%									14.3%	45.4%	14.3%		7.1%			100.0%
Queens	28.3%	9.4%								7.1%	40.9%	14.3%					100.0%
Long Island	22.0%					33.3%					44.7%						100.0%
Westchester and Upstate (East of Hudson)	49.5%										50.5%						100.0%
Rockland and Upstate (West of Hudson)	66.0%										34.0%						100.0%
Northern New Jersey	41.3%			4.2%				4.2%	8.3%		21.3%				20.8%		100.0%
Southern New Jersey	66.0%										34.0%						100.0%
Connecticut and New England	66.0%										34.0%						100.0%
Weighted Average	18.8%	19.8%	2.1%	0.5%	0.0%	0.5%	0.0%	0.5%	1.1%	6.0%	31.5%	3.9%	0.0%	1.7%	2.7%	12.6%	100.0%

PART D: EXHIBITOR DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	66.0%										34.0%						100.0%
Manhattan		35.7%								4.8%	24.1%	1.1%				34.5%	100.0%
Brooklyn	17.7%		58.5%							6.1%	16.4%	1.2%					100.0%
Bronx	13.2%									10.0%	46.8%	20.0%		10.0%			100.0%
Queens	39.6%	13.2%				5.0%					37.2%	5.0%					100.0%
Long Island	22.0%					33.3%					44.7%						100.0%
Westchester and Upstate (East of Hudson)	49.5%										50.5%						100.0%
Rockland and Upstate (West of Hudson)	66.0%										34.0%						100.0%
Northern New Jersey	44.0%							4.8%	9.5%		22.7%				19.0%		100.0%
Southern New Jersey	33.0%			50.0%							17.0%						100.0%
Connecticut and New England	66.0%										34.0%						100.0%
Weighted Average	15.0%	18.1%	1.6%	0.6%	0.0%	0.8%	0.0%	0.6%	1.1%	4.7%	30.8%	5.5%	0.0%	2.3%	2.2%	16.8%	100.0%

PART E: EVENT STAFF ARRIVAL/DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	66.0%										34.0%						100.0%
Manhattan										21.4%	50.0%	25.0%		3.6%			100.0%
Brooklyn	6.6%									15.0%	48.4%	30.0%					100.0%
Bronx	36.7%										41.1%	22.2%					100.0%
Queens	6.6%					10.0%				10.0%	48.4%	25.0%					100.0%
Long Island						50.0%					50.0%						100.0%
Westchester and Upstate (East of Hudson)	66.0%										34.0%						100.0%
Rockland and Upstate (West of Hudson)	66.0%										34.0%						100.0%
Northern New Jersey															100.0%		100.0%
Southern New Jersey	66.0%										34.0%						100.0%
Connecticut and New England	66.0%										34.0%						100.0%
Weighted Average	12.7%	0.0%	0.0%	0.0%	0.0%	4.4%	0.0%	0.9%	0.0%	10.7%	45.8%	23.4%	0.0%	0.8%	2.2%	0.0%	100.0%

Notes: Projections based on Eng-Wong Taub & Associates survey

Table 16: 2025 Convention Center Modal Splits for Weekday Trade Shows

PART A: ATTENDEE ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	66.0%										34.0%						100.0%
Manhattan	1.3%	34.2%		0.8%	11.3%				0.4%	3.6%	26.2%	1.6%		5.5%		15.0%	100.0%
Brooklyn	18.9%	3.1%								21.4%	47.0%	9.5%					100.0%
Bronx										12.5%	67.5%	20.0%					100.0%
Queens	14.0%	14.0%				12.7%				13.6%	42.0%	3.6%					100.0%
Long Island	24.0%	6.0%			9.1%	27.3%					61.5%						100.0%
Westchester and Upstate (East of Hudson)	38.5%										17.0%						100.0%
Rockland and Upstate (West of Hudson)	26.4%	6.6%	10.0%					30.0%	10.0%								100.0%
Northern New Jersey	27.0%	6.0%	2.3%	2.3%				9.1%	20.5%				9.1%		6.8%		100.0%
Southern New Jersey	39.6%							20.0%							20.0%		100.0%
Connecticut and New England	31.4%			19.0%				14.3%									100.0%
Weighted Average	9.6%	23.0%	0.5%	1.4%	7.1%	1.9%	0.0%	2.5%	2.7%	4.3%	30.2%	2.4%	1.0%	3.3%	1.0%	9.1%	100.0%

PART B: ATTENDEE DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	66.0%										34.0%						100.0%
Manhattan	3.0%	31.3%		0.8%	15.9%				0.4%	2.1%	22.8%	1.2%		3.7%		16.9%	100.0%
Brooklyn	14.1%	4.7%								21.4%	48.3%	11.4%					100.0%
Bronx											73.3%	26.7%					100.0%
Queens	12.4%	14.4%				7.5%				15.6%	42.7%	5.0%		2.3%			100.0%
Long Island	24.8%				12.5%	30.0%					53.6%						100.0%
Westchester and Upstate (East of Hudson)	46.2%										32.8%						100.0%
Rockland and Upstate (West of Hudson)	26.4%		20.0%					40.0%			13.6%						100.0%
Northern New Jersey	26.4%		2.9%	2.9%				17.1%	26.6%				2.9%		2.9%		100.0%
Southern New Jersey	66.0%																100.0%
Connecticut and New England	33.0%			22.2%				11.1%									100.0%
Weighted Average	9.0%	22.7%	0.6%	1.4%	11.4%	1.1%	0.0%	2.6%	2.8%	3.0%	26.9%	2.3%	0.3%	2.7%	0.3%	13.0%	100.0%

PART C: EXHIBITOR ARRIVAL MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island					100.0%												100.0%
Manhattan	2.1%	41.6%			16.2%				0.5%	1.9%	24.8%	0.2%		0.7%		12.0%	100.0%
Brooklyn	16.5%									37.5%	46.0%						100.0%
Bronx	66.0%										34.0%						100.0%
Queens	7.6%	31.1%			5.9%					8.8%	31.8%			8.8%		5.9%	100.0%
Long Island						50.0%					33.3%	16.7%					100.0%
Westchester and Upstate (East of Hudson)	37.7%										62.3%						100.0%
Rockland and Upstate (West of Hudson)	33.0%							50.0%			17.0%						100.0%
Northern New Jersey	23.2%	10.7%			2.7%			16.8%	21.6%		17.5%		2.7%		10.8%		100.0%
Southern New Jersey	33.0%							50.0%			17.0%						100.0%
Connecticut and New England	39.6%							10.0%			50.4%						100.0%
Weighted Average	8.3%	32.6%	0.0%	0.0%	12.6%	1.0%	0.0%	2.7%	2.9%	1.8%	25.9%	0.5%	0.3%	1.0%	1.3%	8.9%	100.0%

PART D: EXHIBITOR DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island					100.0%												100.0%
Manhattan	5.1%	33.0%			20.5%						0.9%	21.2%		2.0%		17.3%	100.0%
Brooklyn	16.5%									37.5%	46.0%						100.0%
Bronx	66.0%										34.0%						100.0%
Queens	10.2%	35.5%				4.6%				7.7%	36.2%			5.8%			100.0%
Long Island	13.2%					46.0%					38.6%						100.0%
Westchester and Upstate (East of Hudson)	37.7%										62.3%						100.0%
Rockland and Upstate (West of Hudson)	13.2%			20.0%	20.0%			40.0%			6.8%						100.0%
Northern New Jersey	24.8%	5.5%			4.2%			16.7%	16.7%		15.6%		4.2%		12.5%		100.0%
Southern New Jersey	22.0%							33.3%	33.3%		11.3%						100.0%
Connecticut and New England	24.8%							12.5%			62.8%						100.0%
Weighted Average	9.5%	27.3%	0.0%	0.3%	16.3%	1.1%	0.0%	2.7%	1.7%	1.1%	23.6%	0.0%	0.3%	1.8%	1.0%	13.2%	100.0%

PART E: EVENT STAFF ARRIVAL/DEPARTURE MODAL SPLITS

Trip Region	Auto	Taxi	Commuter Van	Charter Bus	Shuttle Bus	LIRR	Metro-North Railroad	NJ Transit Rail/Amtrak	NY Waterway Ferries	Subway (Other Lines)	Subway (No. 7 Extension)	Subway (Transfer to Bus)	PATH	NYCT Bus	NJ Transit Bus	Walk	TOTAL BY REGION
Staten Island	13.2%									20.0%	46.8%	20.0%					100.0%
Manhattan										33.3%	33.3%					33.3%	100.0%
Brooklyn	18.9%									7.1%	45.4%	28.6%					100.0%
Bronx										16.7%	41.7%	16.7%		25.0%			100.0%
Queens	16.5%					15.0%				25.0%	58.5%						100.0%
Long Island	33.0%					30.0%					67.0%						100.0%
Westchester and Upstate (East of Hudson)	66.0%										34.0%						100.0%
Rockland and Upstate (West of Hudson)	66.0%										34.0%						100.0%
Northern New Jersey	39.6%										20.4%				40.0%		100.0%
Southern New Jersey	66.0%										34.0%						100.0%
Connecticut and New England	66.0%										34.0%						100.0%
Weighted Average	21.0%	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	12.6%	40.0%	8.8%	0.0%	5.1%	5.8%	2.9%	100.0%

Notes: Projections based on Eng-Wong Taub & Associates survey;



PB Team

NYCT – Number 7 Extension Project
 2 Broadway-5th Floor, Mailbox 519
 New York, NY 10004
 Fax: 646-252-2063

would use the existing truck dock exit located on West 34th Street between Eleventh Avenue and Route 9A.

The expanded marshalling facility is proposed to accommodate a total of 194 trucks; the underground approach to the loading docks could also provide space for an additional 70 trucks. This design is expected to accommodate the demand associated with the peak utilization period. Convention Center management has indicated that the heaviest existing truck demands are associated with the New York International Gift Fair,¹⁴ which can attract up to 600 vehicles total (150 tractor trailers, 200 single body trucks, and 250 personally owned vehicles/trucks). The average demand for this trade show involves approximately 400 vehicles spread over a three-day period. However, the major activity days associated with truck arrivals and departures occur on the pre-event setup days and post-event breakdown days (these are typically dark days) and would not generally coincide with event days (days on which shows are open to the public, which are being analyzed for traffic in the DGEIS). To provide for a conservative estimate, based on these truck demands and a review of truck shipping requirements at recent trade shows (including the International Fancy Food & Confections Show and the Variety Merchandise Show), the traffic analyses will conservatively include an increase of 150 daily truck deliveries. This level of truck demand is also assumed to include other types of deliveries (e.g. food, beverages, and other types of materials). The temporal distribution of these trips will be based on surveys documented in the *Coliseum Redevelopment FSEIS* (1997) and shown in Table 18. These temporal distributions correspond with the schedule of the existing Convention Center marshalling yard, which typically operates from 8 AM – 5 PM.

Table 17: Vehicle Occupancies

Weekend Public Show		
	Auto	Taxi
Attendees	3.0	2.6
Exhibitors	1.7	2.5
Event Staff	1.3	-
Weekday Trade Shows		
	Auto	Taxi
Attendees	1.7	1.8
Exhibitors	1.8	2.4
Event Staff	1.2	-

Source: Eng-Wong Taub & Associates, 2003.

Table 18: Projected Distribution of Truck Deliveries to the Convention Center

Analyzed Peak Hour	Percent of Daily Deliveries
Weekday AM (8-9 AM)	7.9%
Weekday MD (12-1 PM)	14.7%
Weekday PM (5-6 PM)	1.1%
Weekday EVE (7-8 PM)	0.0%
Weekday EVE (8-9 PM)	0.0%
Sunday PM (4-5 PM)	1.1%

Source: Coliseum Redevelopment FSEIS, 1997, Table 12-15.

¹⁴ The New York International Gift Fair is currently too large to be entirely accommodated by the existing Convention Center and is concurrently held at the Show Piers at the New York City Passenger Ship Terminal.

**PB Team**

NYCT – Number 7 Extension Project
2 Broadway-5th Floor, Mailbox 519
New York, NY 10004
Fax: 646-252-2063

Convention Center Hotel

Trips associated with the 1,500-room hotel proposed as part of the Convention Center expansion will be calculated separately based on methodologies contained within the Hotel Trip Generation Transportation Planning Assumptions Technical Memorandum (August 7, 2003). As indicated in these assumptions, 2.0 daily trips per room will be assumed to be linked walk trips between the hotel and the Convention Center, which would be linked by a direct internal pedestrian connection.

Retail Space within the Convention Center

Travel demand associated with new retail space (proposed as part of the Convention Center expansion) that would be accessible via West 34th Street, West 42nd Street, or Eleventh Avenue will be forecasted using the methodologies provided within the Local Retail Trip Generation Transportation Planning Assumptions Technical Memorandum (August 7, 2003). All other new retail space within the Convention Center will be assumed to be utilized only by internal visitors; for this reason no additional trips will be forecasted for these retail components.

cc: L. Lennon
D. Fields