

A weighting	The system of modifying measured sound pressure levels to simulate the actual response of the human ear to different sound frequencies.
Access-A-Ride	NYCT’s shared-ride, door-to-door paratransit service for people with disabilities.
Accessibility	A measure of the ability or ease of all people to travel among various origins and destinations.
ACHP	Federal Advisory Council on Historic Preservation (see below).
ACM	Asbestos-containing material.
ACOE	U.S. Army Corps of Engineers.
ADA	Americans with Disabilities Act.
ADA compliant passageway	Pedestrian corridor constructed to comply with design standards established in the Americans with Disabilities Act
A Division train	The type of NYCT subway used on all numbered routes (1 2 3 4 5 6 7 9) and the Times Square shuttle (S). A Division cars are narrower, shorter, and have less capacity than B Division cars.
Advisory Council on Historic Preservation (ACHP)	An independent Federal agency established by the National Historic Preservation Act of 1966 (NHPA) to advise the President and Congress on historic preservation matters. It reviews policies and programs of Federal agencies to improve their consistency with NHPA purposes, and administers and participates in the preservation review process established by Section 106 of the NHPA. Under Section 106, federal agencies must seek the Council’s comments prior to carrying out, approving financial assistance to, or issuing a permit for a project that may affect properties listed or eligible for listing on the National Register of Historic Places.
AFT	MTA’s “Arts for Transit” program.
Air pollution	The presence of unwanted material in the air in sufficient amount and under such circumstances as to interfere significantly with human comfort, health, or welfare, or with full use and enjoyment of property. National and state ambient air quality standards identify pollutant concentrations not to be exceeded over a specified time.
Alignment	The route of a highway, railroad, or fixed guideway transit.
Alternatives Analysis	A study conducted pursuant to the Federal Transit Administration’s requirements for new transit projects.

Ambient air quality	A physical and chemical measure of the concentration of various pollutants in the outside air, usually determined over a specified time period (e.g., 1 hour, 8 hours).
Ambient air quality standards	See National Ambient Air Quality Standards.
Ambient noise level	The total noise level in the acoustical environment, excluding the proposed project.
AM peak hour	The hour during the morning during which the largest number of commuters travel to work. In Manhattan, the AM peak hour is typically the 8-9 AM morning rush hour.
AM peak period	Peak morning travel period (usually from 6 AM to 10 AM).
Anadromous	Used to describe fish that migrate up rivers from the sea to breed in freshwater.
APE	Area of Potential Effect (see below).
Aquatic biota	Include phytoplankton, zooplankton, benthic invertebrates, and fish.
Area of Potential Effect (APE)	An APE is the geographic area within which a project may have a direct or indirect effect on historic or archaeological resources, if any are present.
Arterial	Streets that serve primarily through traffic and provide access to abutting properties as a secondary function.
Articulated bus	A 60-foot-long bus that bends in the middle with capacity for up to 90 passengers. Articulated buses have 50 percent more capacity than a standard bus (which has a 60-passenger capacity).
As-of-right	Development that could occur on a parcel of land under existing zoning and without the granting of additional approvals.
AST	Above-ground storage tank.
B Division train	The type of NYCT subway used on all lettered routes except the Times Square shuttle (S)—i.e., A B C D E F G J L M N O R V W Z and Franklin Shuttle (S). B Division cars are wider, often longer, and have more capacity than A Division cars.
Bellmouth	A widening of a railroad tunnel to provide for a future branch connection.
Benthic invertebrates	Invertebrate organisms that inhabit river bottom sediments and submerged objects.
Bentonite	A natural, clay-like, mineral used in liquid slurry to facilitate the construction of concrete retaining walls.
BID	Business Improvement District.
Bishop's crook	An ornamental street lighting fixture characterized by a curved and intricate “gooseneck” design.

Blast shaft	Shafts located outside a subway platform that relieve the air pressure caused when trains enter and leave a station.
BMT	Brooklyn-Manhattan Transit (see below).
British Thermal Unit (BTU)	A measure of energy used to compare consumption of energy from different sources, taking into consideration how efficiently those sources are converted to energy. One BTU is the quantity of heat required to raise the temperature of one pound of water by one Fahrenheit degree.
Broadway Line	The subway line running generally beneath Broadway in Manhattan, entering from Queens at 59th Street (with the first stop at Lexington Avenue). Currently served by C W N R .
Brooklyn-Manhattan Transit (BMT)	A formerly privately operated New York subway company. The BMT merged with the IND and IRT in 1940 to form the current system.
BTEX	Benzene, toluene, ethylbenzene, and xylene, which are volatile organic compounds that are common constituents of gasoline.
Build year	The year of analysis used to assess impacts; 2020 is the Build year for this project. Generally this is a point after the project has been completed and ridership has settled into new patterns.
Bump out	Location where a sidewalk is widened into a street's parking lane.
Bus bunching	A common condition affecting bus operations, where two or more buses arrive at a bus stop within minutes or seconds of each other, followed by a significant period of time until the next bus arrives.
CAAA	Clean Air Act Amendments of 1990 (see below).
Caisson	A structure used in underwater work, consisting of an airtight chamber, open at the bottom, and containing sufficient air pressure to keep out water.
CAL3QHC model	Mathematical dispersion model for predicting air pollution by simulating carbon monoxide concentrations near roadway intersections.
Canal Flip	The term for a subway option explored in the MESA Study that would have "flipped," or crossed, the Broadway Line express and local tracks at Canal Street, allowing new MESA subway trains to continue south to Broad Street in Lower Manhattan. The Second Avenue Subway does not include the Canal Flip.
Capacity	The physical ability of a transportation system, or any of its elements, to carry travelers from one point to another.
Capital costs	The cost of designing, constructing, purchasing equipment (e.g., vehicles), and implementing a transit system.
Catadromous	Used to describe fish that live in freshwater but migrate to marine waters to breed.
CBD	Central Business District (see below).

CBTC	Communication-Based Train Control (see below).
Center island platform	A subway or train platform with tracks on both sides.
Central Business District (CBD)	A CBD is a primary downtown area of a city, or an area of concentrated retail activity. Also characterized by high land valuation and traffic flow.
CEPP	Construction Environmental Protection Program (see below).
CEQR	City Environmental Quality Review, the local New York City law set forth by Executive Order No. 91 of 1977, governing environmental review for actions undertaken by New York City agencies.
Clean Air Act Amendments of 1990 (CAAA)	A federal law enacted in 1990 that places new federal controls on all sources of air pollution and places new emphasis on regional transportation planning. The CAAA includes an implementation strategy and establishes air quality improvement requirements.
CMS	Congestion Management System.
CO	Carbon monoxide.
Coastal Zone Management Program	A state initiative promulgated in accordance with federal requirements designed to set policies for managing waterfront resources in the public interest.
Coastal zone	A geographic area of New York State’s coastal waters and adjacent shorelines, generally including islands, tidal wetlands, beaches, dunes, barrier islands, cliffs, bluffs, estuaries, flooding- and erosion-prone areas, port facilities, and other coastal locations.
Combined sewer	A sewer system that carries sanitary flow during dry weather and both sanitary and storm water flows during wet weather.
Combined sewer outfall (CSO)	A CSO is an outfall that discharges without treatment combined sanitary sewage and storm water runoff into rivers, streams, bays, or the ocean.
Communication-Based Train Control (CBTC)	Also known as “moving block” control, CBTC is a type of subway signal system that uses an independent communication network to determine safe subway train operation and permissible speeds for following other trains. Currently being installed on the Canarsie Line (L). Compare with fixed-block signal system, below.
Construction Environmental Protection Program (CEPP)	<u>The document in which all project commitments and requirements related to construction are incorporated. Its relevant provisions would be incorporated into construction contracts that contractors would be obligated to follow.</u>
Contextual district	Within New York City’s Zoning Resolution, these districts (indicated by a letter following the district number – e.g., the “B” in R8B) are mapped where the prevailing visual character or “context” of a street relies on a consistent building form.

Controlled blasting	A specialized construction technique used to excavate rock. Numerous small holes are drilled into the rock and small explosive charges are placed into the holes. The charges are detonated in a delayed sequence that precisely breaks the rock and minimizes unwanted vibration and noise effects.
Conventional mining	A method of construction excavation that involves controlled drilling and blasting. See <i>Drill-and-blast mining</i> , below.
CPC	New York City’s City Planning Commission.
“Crush” capacity	The maximum physical capacity of a subway train. The crush capacity for A Division trains (see above) is 1,650 and for B Division trains (see above) ranges from 2,010 to 2,300.
CSO	Combined sewer outfall (see above).
Cut-and-cover	A method of excavation whereby the construction takes place from the ground surface. Once the excavation reaches a certain depth, the open cut can be covered with a steel or concrete plate to enable traffic or pedestrians to traverse the excavation while construction proceeds below.
CZMA	Federal Coastal Zone Management Act.
Daylighting	A form of traffic management that involves daytime removal of parking, particularly during peak travel periods, for a short distance (typically 50 to 100 feet) in order to reduce congestion at an intersection approach.
dB	Decibel, a unit of sound level.
dBA	A-weighted decibel. A sound pressure level that incorporates the human ear’s sensitivity to pitch.
DCP	New York City Department of City Planning.
Deadhead trips	Term used to describe the trips made by buses or trains when they are returning to their origin point and are not carrying passengers.
DEC	New York State Department of Environmental Conservation.
Decibel (dB)	The unit for measuring noise, which is 10 times the logarithm of the ratio of the sound pressure squared to a standard reference pressure squared.
Deep Chrystie Option	An option for the Second Avenue Subway’s Water Street alignment between Houston and Canal Streets that would involve constructing the Second Avenue Subway beneath the B D tracks under Chrystie Street. A transfer that would require changing platform levels would also be provided. Compare with Shallow Chrystie Option, below.
DEIS	Draft Environmental Impact Statement.
De minimis criteria	The minimum incremental increase in 8-hour average carbon monoxide levels that constitutes a significant adverse air quality impact as defined by New York City.

DEP	New York City Department of Environmental Protection.
Desanding	A process used to remove sand or silt from slurry before its reuse.
Determination of Eligibility	The decision of the State Historic Preservation Officer (SHPO) on whether properties or resources are eligible for the State and/or National Register of Historic Places.
Dewatering	The removal of groundwater by pumping so as to artificially depress the water table and avoid the difficulties associated with construction below the water table.
DO	Dissolved oxygen.
DOI	U.S. Department of the Interior.
Drill-and-blast mining	A type of conventional mining, where small holes are drilled in a rock area, and explosives are inserted in each hole and detonated.
Dual bus lanes	Curb lane and immediately adjacent travel lane reserved exclusively for buses.
Dwell time	The time when a train is fully stopped in a station to let passengers on and off.
Earth-pressure-balance machine (EPBM)	An EPBM is a type of tunnel boring machine (TBM) used in soil.
Easement	The legal right to use a portion of another owner's property. For example, an underground tunnel easement would give the permanent right for a subway tunnel to pass below private property.
East Side Access (ESA)	LIRR's project to provide direct access for LIRR riders to Grand Central Terminal via a new tunnel from Sunnyside, Queens.
Ecosystem	The entire system of organisms and the chemical and physical aspects of the environment.
EDC	New York City Economic Development Corporation.
EFH	Essential Fish Habitat (see below).
EIS	Environmental Impact Statement.
el	Abbreviation for "elevated train line."
Emulsion explosive	A water-based explosive that is extremely insensitive to shock.
EPA	U.S. Environmental Protection Agency.
EPBM	Earth-pressure-balance machine (see above).
ESDC	Empire State Development Corporation, a New York State agency.
Essential Fish Habitat	Defined by Congress as "those waters and substrata necessary to fish for spawning, breeding, feeding or growth to maturity."
FAR	Floor area ratio, the ratio of a building's floor area to its lot size.

FDNY	Fire Department of New York City.
Federal Transit Administration (FTA)	The federal department of mass transportation and the lead agency for the environmental review of this EIS. Administratively, the FTA is under the United States Department of Transportation (USDOT).
Feeder bus routes	Routes on which most passengers have a common origin or destination.
FEIS	Final Environmental Impact Statement.
FEMA	Federal Emergency Management Agency.
FHWA	Federal Highway Administration.
FIRE	Finance, insurance, and real estate.
Fixed-block signal system	The signal system currently used to control subway operations. Each signal block is a section of track controlled by a particular set of signals. Compare with CBTC, above.
Flexibility	The adaptability of a transportation system to accommodate the travel demands within the system if one component of the system fails, and its ability to accommodate future growth.
Floating slab	The addition of a second floor slab that is isolated from the first slab by resilient elements which can be used to attenuate the transfer of vibration from a tunnel to the building above.
Floodplain	The lowlands adjoining the channel of a river, stream, or watercourse, or ocean, lake, or other body of water, which have been or may be inundated by floodwater (as established by the National Flood Insurance Act).
Forsyth Street Option	An option for the Second Avenue Subway's Water Street alignment between Houston and Canal Streets that would construct the Second Avenue Subway east of the Sara D. Roosevelt Park underneath Forsyth Street. This option would use the existing Confucius Plaza tunnel segment for ancillary facilities and have a 200-foot-long passageway at Grand Street between the Second Avenue Subway station under Forsyth Street and the B D Grand Street Station.
FTA	Federal Transit Administration (see above).
FWS	United States Fish and Wildlife Service.
GCT	Grand Central Terminal.
Grid bus routes	Routes characterized by passengers boarding and exiting a bus throughout the route.
Groundwater	The water contained beneath the surface in soils and rock.
Guideline capacity	The capacity of a subway train using New York City Transit's guideline capacity of 3 square feet per standing passenger. The guideline capacity for A Division trains (see above) is 1,110 and for B Division trains (see above) ranges from 1,400 to 1,450.

HASP	Health and Safety Plan.
Hazardous waste	A substance, as defined under the federal Resource Conservation and Recovery Act, that is chemically reactive, ignitable, corrosive, or toxic.
Headway	The time interval between consecutive transit vehicles (subways or buses) that operate along the same route.
HHC	New York City Health and Hospitals Corporation.
High-occupancy vehicle	A vehicle carrying two or more passengers (for example, a bus, vanpool, or carpool). HOVs are encouraged as a means of decreasing vehicle miles traveled (VMTs). May also be referred to as Multi-occupancy Vehicle (MOV).
Hog house	A facility located at a construction site where workers can shower and wash.
HOV	High-occupancy vehicle (see above).
HPD	New York City Department of Housing Preservation and Development.
(the) Hub	The Midtown Central Business District (CBD) below 60th Street.
HUD	U.S. Department of Housing and Urban Development.
HVAC	Heating, ventilation, and air conditioning.
IND	Independent system (see below).
Independent system (IND)	A City owned and operated subway system (under Sixth and Eighth Avenues in Manhattan) constructed in the 1920s and 1930s. The IND merged with the IRT and BMT in 1940 to form the current system.
Interborough Rapid Transit (IRT)	A formerly privately operated New York subway company. The IRT merged with the IND and BMT in 1940 to form the current system.
Intermodal Surface Transportation Efficiency Act (ISTEA)	Legislation enacted by Congress in 1991 that makes funds available to aid metropolitan areas throughout the United States in the development of transportation systems that are not harmful to the environment and will bring metropolitan areas into compliance with the Clean Air Act. ISTEA was superseded by TEA-21 (see below).
Intermodal transfer	A transfer from one mode of transportation (such as auto, taxi, bus, and walking) to another.
IRT	Interborough Rapid Transit (see above).
ISO 14001	An internationally recognized environmental management system that provides organizations with a structured approach for managing environmental and regulatory responsibilities to improve overall environmental performance, including areas not subject to regulation.
ISTEA	Intermodal Surface Transportation Efficiency Act (see above).
ITS	Intelligent Transportation Systems.

Jet grout	A soil stabilization technique that involves drilling pilot holes, and then injecting under pressure a mixture of cement, water, and air into the soil via injection rods inserted into the pilot holes. As the rods are withdrawn, they are rotated, resulting in a series of columns consisting of a soil and cement grout mixture hardened to a strength suitable to stabilize the soil, thereby allowing construction to occur underneath.
L_{dn}	An average sound level over the entire day where the nighttime hours are weighted more than those during the daytime.
L_{eq}	Equivalent sound level, or an energy average sound level, usually specified over a period of time. This is the constant sound level that, in a given period, conveys the same sound energy as the actual time-varying sound.
L_{max}	Maximum instantaneous sound level.
LDC	Local Development Corporation.
Leave-load	A measure of subway crowding, based on a visual observation of people in a subway car as a train exits a station.
Level of service	A set of descriptive characteristics used to indicate the quality of transportation service provided, including characteristics that are quantifiable (e.g., frequency, travel time, vehicle delay). Levels of service are usually qualified with letter designations, ranging from “A” (LOS A) with the least amount of congestion to “F” (LOS F) with the greatest amount.
Lexington Avenue Line	The 4 5 and 6 subway routes that provide full north-south rapid transit service to Manhattan’s East Side, Brooklyn, and the Bronx.
Light Rail Transit (LRT)	Electronically powered vehicles that operate on tracks on city streets and either share the roadway with autos or travel in separate rights-of-way.
Line haul capacity	The number of trains and their passenger capacity that can pass through a given point in the system.
LIRR	MTA Long Island Rail Road.
Littoral zone	All areas where water depths are shallower than 6 feet at mean low water.
LMA	MTA Lower Manhattan Access Study.
Local Waterfront Revitalization Program (LWRP)	A plan implemented under the federal Coastal Zone Management Act and the New York State Coastal Management Programs that sets forth standard policies for reviewing projects and public actions proposed in a locally designated Coastal Zone.
LOS	Level of service (see above).
Lower Manhattan Access Study (LMA)	An analysis initiated by the MTA in 1997 to examine transportation alternatives that would improve access from the New York City suburbs to Lower Manhattan.

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LPC	New York City Landmarks Preservation Commission.
LRT	Light-rail transit.
LUST	Leaking underground storage tank.
LWRP	Local Waterfront Revitalization Program (see above).
Manhattan East Side Transit Alternatives Study (MESA)	Begun in 1995, the MESA Study, sponsored by FTA and MTA, in coordination with NYCT, was part of MTA's long-range planning to identify options for addressing the transportation problems and needs on Manhattan's East Side.
Maximum load point	The point where the number of passengers on each bus route is the heaviest during a certain time period.
Maximum surge condition	The point at which the maximum number of pedestrians are in a particular crosswalk.
MCTA	Metropolitan Commuter Transportation Authority. Now the MTA.
Mechanized mining	A method of construction that uses tunnel-boring machines (TBMs) or earth pressure balance machines (EPBMs) to excavate rock, soil, or both.
MESA	Manhattan East Side Transit Alternatives (see above).
Metropolitan Planning Organization (MPO)	MPOs are tasked by ISTEA and TEA-21 with overseeing their metropolitan area's compliance with the National Ambient Air Quality Standards (see below). NYMTC is the MPO for the New York metropolitan region.
Mined excavation	A method of constructing tunnels or other underground spaces from below the surface. Unlike cut-and-cover construction, the ground surface is not disturbed with this technique. The mining may be accomplished in a number of ways including drilling with controlled blasting, tunnel boring machines, other methods of rock/soil excavation.
MIS	Major Investment Study, an alternatives analysis conducted under ISTEA (see above). MESA was a combined MIS and DEIS.
Mitigation	Measures designed to lessen or eliminate the adverse impacts resulting from a proposed project or action.
MLW	Mean low water.
MOA	Memorandum of Agreement.
MOBILE5B	Vehicle emissions simulation model developed by the Environmental Protection Agency to predict air pollution.
Mobile source	Vehicular sources of air pollution, such as automobiles, trucks, and buses.
Mode	The form of travel (e.g., walking, automobile, bus, train).
MPO	Metropolitan Planning Organization (see above).
MTA	Metropolitan Transportation Authority.

NAAQS	National Ambient Air Quality Standards (see below).
Nassau Street Alignment	One of two possible alignment options for the Second Avenue Subway south of Houston Street (the other is the Water Street Alignment). This option would connect the Second Avenue Subway to the existing Nassau Street Line (J M Z service) at Kenmare Street, just south of Houston Street. It would bring new subway service to the heart of the Financial District and allow the new service to continue into Brooklyn.
National Ambient Air Quality Standards (NAAQS)	Standards established by Congress under the Clean Air Act for six major air pollutants (carbon monoxide, nitrogen oxides, photochemical oxidants or ozone, inhalable particulates, sulfur dioxide, and lead). These are also New York State’s air quality standards.
National Environmental Policy Act (NEPA)	Federal legislation enacted to require federal agencies to evaluate the environmental consequences of proposed actions and their alternatives, to identify measures to mitigate any significant adverse impacts, and to conduct the entire process in coordination with other agencies and the public.
National Historic Preservation Act of 1966	Statute enacted by Congress establishing a nationwide policy to support and encourage the preservation of prehistoric and historic resources and to direct Federal agencies to assume responsibility for considering such resources in their activities. Section 106 of the Act does not mandate preservation of such resources but requires Federal agencies to consider the impact of actions on historic properties listed or eligible for listing on the National Register of Historic Places.
National Register of Historic Places (N/R)	The federal list of buildings and sites determined to have historic significance, established by the National Historic Preservation Act.
National Wetlands Inventory	Established by the U.S. Fish and Wildlife Service to generate information about the characteristics, extent and status of the nation’s wetlands and deepwater habitats. NWI maps show the location and classification of wetlands throughout New York State.
Natural Resources	A plant and animal species and any area capable of providing habitat for plant and animal species or capable of functioning to support ecological systems and maintain environmental balance.
Neckdown	A sidewalk widening at a bus stop.
NEPA	National Environmental Policy Act (see above).
New Jersey Transit (NJT)	NJ Transit provides commuter service from points west by both bus and rail to New York City. Its bus operations terminate at Port Authority Bus Terminal, and its rail operations at Penn Station.
NFPA	National Fire Protection Association.
NHL	National Historic Landmark.
NHPA	National Historic Preservation Act (see above).

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NJT	New Jersey Transit.
NMFS	National Marine Fisheries Service.
NO₂	Nitrogen dioxide; an air pollutant and precursor to ozone.
NOAA	National Oceanic and Atmospheric Administration.
No Build Alternative	Consists of the projects and improvements to be undertaken or implemented by the NYCT before 2020 (the EIS's analysis year), regardless of whether the Second Avenue Subway is implemented.
Non-attainment area	The United States Environmental Protection Agency's classification for an area or region where federal ambient air quality standards are not being met.
NO_x	Nitrogen oxides; a group of air pollutants that contribute to the formation of ozone.
NR	National Register of Historic Places (see above).
NWI	National Wetlands Inventory (see above).
NWP	United States Army Corp of Engineers nationwide permit program.
NYCDEP	New York City Department of Environmental Protection.
NYCDOT	New York City Department of Transportation.
NYCDPR	New York City Department of Parks and Recreation.
NYCEDC	New York City Economic Development Corporation.
NYCHA	New York City Housing Authority.
NYCHPD	New York City Department of Housing Preservation and Development.
NYCL	New York City Landmarks and Historic Districts.
NYCRR	New York Codes, Rules and Regulations.
NYCT	MTA New York City Transit.
NYMTC	New York Metropolitan Transportation Council (the MPO).
NYPA	New York Power Authority.
NYPD	New York Police Department.
NYSDEC	New York State Department of Environmental Conservation.
NYSDEL	New York State Department of Labor.
NYSDOS	New York State Department of State.
NYSDOT	New York State Department of Transportation.
NYSM	New York State Museum.
NYU	New York University.
Off-peak period	The periods of the day that are not during the peak travel periods.

OPRHP	New York State Office of Parks, Recreation and Historic Preservation.
OSHA	U.S. Occupational Safety and Health Administration.
Ozone	An unstable form of oxygen formed by a photochemical reaction of atmospheric gases with solar ultraviolet radiation. While a valuable component of the upper atmosphere, it is a harmful air pollutant in the lower atmosphere and contributes to the formation of smog.
PAC	Public Advisory Committee.
PAH	Polycyclic aromatic hydrocarbons (see below).
PANYNJ	Port Authority of New York & New Jersey.
Particulate matter	Airborne particles consisting of a variety of materials such as dust, soot, and aerosols.
PATH	Port Authority Trans Hudson, the underground fixed-rail transit service operated by the Port Authority between New Jersey and New York.
PCB	Polychlorinated biphenyl (see below).
PCE	Passenger car equivalent.
PCPH	Passenger car equivalents per hour.
Peak hour	The hour during the morning and evening when the greatest number of people travel to work. The morning peak hour in Manhattan is typically 8 to 9 AM and the evening peak hour is 5 to 6 PM.
Peak period	The period during which the maximum amount of travel occurs. It may be specified as the morning (AM), afternoon/evening (PM) peak, or hourly. It is the period when demand for transportation services is the highest. In Manhattan, the peak periods are generally 6 to 10 AM and 3 to 7 PM.
Person-year	The equivalent of one employee working full-time for one year.
PM peak hour	The hour during the evening when the greatest number of people travel to work. In Manhattan, the PM peak hour is typically the 5-6 PM afternoon rush hour.
PM peak period	The afternoon rush hours, approximately 4 to 7 PM.
PM₁₀	Particulate matter of 10 microns or less. Particulates of this size are small enough to be respirable.
PM_{2.5}	Particulate matter of 2.5 microns or less. Particulates of this size show consistent and coherent associations with severe health effects.
Polychlorinated biphenyls (PCB)	A class of semivolatile organic compounds (SVOCs) that were commonly used in electrical equipment, especially transformers. Exposure to PCBs can pose long-term risks to wildlife and human health.

Polycyclic aromatic hydrocarbons (PAH)	Polycyclic aromatic hydrocarbons (PAHs) are a class of Semivolatile Organic Compounds (SVOCs) associated with combustion (e.g., coal, ash, petroleum) and have historically been used as fill throughout New York City. Exposure to PAHs can pose long-term risks to human health.
Ppm	Parts per million.
Primary production	The creation of new organic matter from inorganic substances.
Public Advisory Committee (PAC)	A PAC comprises representatives from a number of elected officials' offices and other interested parties that serve as a reviewing body of project issues and primary liaison between organizations interested in the project and the project team.
Receptor site	A location chosen for analysis of air quality or noise. A receptor site is near, but not at, the source of air pollution or noise being analyzed.
Redbird	Name given for red-painted model of a subway car that is currently used on A Division (1 2 3 4 5 6 7 9) routes and planned to be retired by the end of 2004.
Regional Transit Forecasting Model (RTFM)	MTA's model to predict regional travel patterns and determine the travel modes used by the region's commuters.
Resilient fasteners	Special fasteners that are used to connect the steel rail to the railroad tie which helps to attenuate the vibration effects of the train into the surrounding ground surface.
Ridership volume	Total number of passengers riding trains regardless of the seated capacities of the trains.
Right-of-way	A corridor of land acquired by reservation, dedication, prescription, or condemnation, and intended to be utilized as a road, rail line, utility service, buffer, or similar use.
ROD	Record of Decision, the federal lead agency's findings on a project based on an EIS prepared under NEPA.
Rolling stock	Train or subway cars.
RPAD	Real Property Assessment Database, a database of property information prepared by the New York City Department of Finance.
RTFM	Regional Transit Forecasting Model (see above).
RTP	Regional Transportation Plan.
Rumble strip	Typically bright-yellow-colored safety paving on the edge of a subway platform.
SAS	Second Avenue Subway
SAV	Submerged aquatic vegetation.

S-Curve	A term used to describe the shape of a portion of the alignment in the 125th Street vicinity assessed as part of the Second Avenue Subway's MIS/DEIS but no longer under consideration.
S/NR	State and National Registers of Historic Places.
Screen line	A point at which volumes of transit passengers are calculated as they enter the CBD.
Scoping	The process of defining the studies to be undertaken for an Environmental Impact Statement.
SDEIS	Supplemental Draft Environmental Impact Statement.
Seated capacity	The maximum number of passengers that can be accommodated on trains without exceeding the number of seats.
Section 4(f)	Section 4(f) of the Department of Transportation Act of 1966, which prohibits the Secretary of Transportation from approving the use of any publicly owned land from a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance; or any land from a historic site of national, state, or local significance unless there is no feasible and prudent alternative and all possible planning to minimize harm has been incorporated.
Section 4(f) process	A regulatory process initiated when a project proposes the use of land from a publicly owned park, recreational area, wildlife or waterfowl refuge area, or any historic site.
Section 4(f) property	Land contained in a publicly owned park, recreational area, wildlife or waterfowl refuge area, or any significant historic site.
Section 106	See National Historic Preservation Act of 1966
Section 197-a	A section of the New York City Charter that authorizes community boards and borough boards, as well as the mayor, the City Planning Commission, the Department of City Planning, and any borough president, to sponsor plans for the development, growth, and improvement of the city, its boroughs, and communities.
SEL	Sound Exposure Level.
Semi-volatile organic compound	Organic compounds that exhibit some evaporation under normal circumstances.
SEQRA	New York State Environmental Quality Review Act. State legislation similar to NEPA, requiring New York State agencies to examine the environmental effects of their discretionary actions.
Shaft sites	Excavated areas along the Second Avenue alignment where TBMs would be installed and materials resulting from tunnel excavation removed. Shaft sites would also be used by workers entering and leaving the tunnel, and to transport construction materials into and out of the tunnels.

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Shallow Chrystie Option	An option no longer under consideration for the Water Street Alignment between Houston and Canal Streets that would involve constructing the Second Avenue Subway alongside the B D tracks under Chrystie Street and connecting to the existing tunnel beside Confucius Plaza. A cross-platform transfer to the Sixth Avenue Line at the Grand Street Station would also be provided. Compare with Deep Chrystie Option, above.
Shotcrete	Pneumatically sprayed concrete.
SHPA	New York State Historic Preservation Act of 1980.
SHPO	State Historic Preservation Office (see below).
SIC	Standard Industrial Classification.
SIP	State Implementation Plan (see below).
Slurry	A clay-like semi-solid pumped into a trench to form a slurry wall. The slurry is then displaced by concrete pumped into the trench. Slurry permits only minimal transmission of water and is used to isolate an area from the surrounding groundwater regime and reduce the rate of pumping required during dewatering.
Slurry wall	Retaining wall constructed by excavating a wall area and then filling it with a bentonite (clay-type) material to hold the ground in place and prevent water infiltration until final concrete is pumped into the trench to replace the bentonite and create the final retaining wall.
S/NR	State and National Registers of Historic Places.
SO₂	Sulfur dioxide; an air pollutant mainly associated with the combustion of sulfur-containing fuels such as diesel and fuel oil.
Soil borings	Deep, cylindrical soil samples taken to ascertain geological conditions and often used to assist in the determination of whether archaeological resources or hazardous materials are found on the site.
Sparging	Agitation of a liquid by means of compressed air or gas injected through a pipe removing contaminants through volatilization.
SPCC (40 CFR 110, 112)	Spill Prevention, Containment, Countermeasure (see below).
SPDES	New York State Pollutant Discharge Elimination System. SPDES (pronounced “SPEED-ies”) is a state permit program under Article 17, Title 8, of the New York State Environmental Conservation Law to protect the state’s waters from polluted discharges.
Special Purpose Districts	Particular neighborhoods or areas promulgated by New York City’s zoning code and intended to achieve specific planning and urban design objectives.
Special Transit Land Use District	A district established in 1974 along Second Avenue to support construction of the Second Avenue Subway, requiring provision of easements for transit use in designated locations.

Spill Prevention, Containment, Countermeasure	A federal policy established pursuant to (40 CFR Parts 110 and 112) that limits discharges to navigable waters so as not to produce visible sheens.
SR	New York State Register of Historic Places.
Spoils	Rock and soil excavated during mining.
Staging area	An area from which certain construction activities (such as storage, delivery of materials, layover of equipment) occurs.
State Historic Preservation Office (SHPO)	The SHPO (pronounced “SHIP-oh”) is the state administrative agency responsible for compliance with historic preservation rules, laws, and regulations. In New York State, the SHPO is part of the OPRHP.
State Implementation Plan (SIP)	A SIP is a state plan mandated by the Clean Air Act to bring an area into compliance with the National Ambient Air Quality Standards for a given air pollutant.
State Register of Historic Places	The state list of buildings and sites determined to have historic significance, established by the New York State Historic Preservation Act.
State Transportation Implementation Plan (STIP)	The state-wide plan that includes all projects in the Transportation Improvement Program.
STIP	State Transportation Implementation Plan (see above)
Stub-ended	Tracks that terminate in the station, requiring a train to reverse direction to exit the station.
Substation	A component of the electrical power distribution system at which high voltage power is converted to low voltage power.
Superblock	Large city blocks that interrupt the street grid with major development complexes.
SVOC	Semi-volatile organic compound (see above). Organic compounds which exhibit some evaporation under normal circumstances.
TAC	Technical Advisory Committee (see below).
TBM	Tunnel boring machine (see below).
TCLP	Toxicity Characteristics Leaching Procedure. A laboratory test used to determine the hazardous characteristics of a solid waste or soil.
TDFM	Transit Demand Forecasting Model (see below).
TDM	Travel Demand Management.

TEA-21	Transportation Equity Act for the 21st Century, adopted in May 1998. This federal legislation makes funds available to aid metropolitan areas in the development of transportation systems that are not harmful to the environment and that will bring metropolitan areas into compliance with the Clean Air Act.
Technical Advisory Committee (TAC)	A TAC comprises representatives on the federal, state, and local level that serve as liaisons to their respective organizations on technical matters relating to the evolution of the project.
Third rail	An electric conductor rail located alongside the running rail from which power is supplied to the subway car by means of a sliding contact shoe attached to the truck of electric equipment.
Throughput	The number of trains that can safely pass through a given tunnel segment in a particular time.
Thrust block	A large piece of concrete fitted to the bend of a pipe to prevent the pipe from moving as water flows through it.
TIP	Transportation Improvement Program (see below).
Transfer mobility	The measure of the efficiency of vibration transmission through the ground, offering a means of predicting train and construction-induced vibration levels in buildings prior to project construction.
Transit Demand Forecasting Model (TDFM)	NYCT’s model to predict transit routes that riders choose.
Transportation Improvement Program (TIP)	As set forth by ISTEA and TEA-21, a TIP is a document prepared by the Metropolitan Planning Organizations citing projects to be funded under federal transportation programs for a full-year period.
Transportation Systems Management Alternative (TSM)	Transportation improvements that seek to maximize the utility of the current transportation investments without a major investment in new facilities.
Tribeca	An acronym for “triangle below Canal Street.” It is the area of Manhattan bounded on the north by Canal Street, on the east by West Broadway, on the west by West Street, and on the south by the site of the World Trade Center.
Trip	A single or one-way movement to or from a location.
Truck Trip	A combined ingress and egress movement by truck.
TSM	Transportation Systems Management (see above).
Tunnel boring machine (TBM)	A TBM is a large-diameter drill that excavates a circular tunnel section, custom designed and built for project-specific geology and for the specific requirements of the project being constructed.
ULURP	Uniform Land Use Review Procedure.

UMEZ	Upper Manhattan Empowerment Zone.
Underpinning	A construction technique that involves placing new foundations under an existing building to allow construction to occur in the area of the original foundations.
Uniform Act	Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and the Uniform Relocation Act Amendments of 1987 provide fair, uniform, and equitable treatment of persons displaced from their homes, businesses, or farms by federal and federally assisted programs.
URA	Urban Renewal Area.
USFWS	U.S. Fish and Wildlife Service.
UST	Underground storage tank.
v/c	Volume-to-capacity ratio (see below).
VdB	A unit of measure of vibration in decibels, which are distinct from noise decibels.
Vehicle miles traveled	The total number of miles traveled by motor vehicles for a given area and time period.
VMT	Vehicle miles traveled (see above).
VOC	Volatile organic compound (see below).
Volatile organic compounds (VOC)	A family of highly evaporative organic materials used in a variety of industrial applications, such as paints and solvents and a major constituent of petroleum-based fuels.
Volume	The number of passengers or vehicles that can be accommodated by a train, train platform, train tracks and tunnels, stairwell, mezzanine, bus, sidewalk, or street's traffic lanes (or combination of any of the previous).
Volume-to-capacity ratio (v/c)	To determine the severity of crowding in a transportation system, volumes (the amount of passengers or vehicles) are compared with capacities (the ability of such a system to carry travelers from one point to another during a specified time frame).
vph	Vehicles per hour.
Water Street Alignment	One of two possible alignment options for the Second Avenue Subway south of Houston Street (the other is the Nassau Street Alignment option). This option would involve the continuation of the new subway route directly south from Houston Street via Chrystie or Forsyth Street, Chatham Square, St. James Place, Pearl Street, and Water Street. It would bring passengers to the eastern part of Lower Manhattan, to an area currently without convenient subway service.
Wetlands	Transitional land between terrestrial and aquatic systems, where the water table is usually at or near the surface, or the land covered by shallow water.
WRP	Waterfront Revitalization Program, Serving As New York City's Coastal Zone Management Program. See also LWRP. *