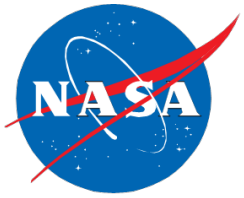

ATD-2 Integrated Arrival/ Departure/Surface (IADS) System Glossary

Louise K. Morgan-Ruszkowski
KBRWyle/Parallel Innovations
NASA Ames Research Center, Moffett Field, CA

Ehsan Talebi
Millennium Engineering & Integration Company
NASA Ames Research Center, Moffett Field, CA

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1 Purpose

The ATD-2 Glossary is a compilation of data elements and terms in the ATD-2 IADS System along with descriptions and related information. The purpose is to provide a common understanding of the terms for anyone interested in ATD-2.

This information was extracted from the ATD-2 Confluence team collaboration archives.

Blue highlighting indicates the new or modified data elements and terms.

2 ATD-2 Data Elements/Terms

The table contains an alphabetically sorted list of ATD-2 data elements and terms organized as follows.

- **Data Element/Term:** Full name as acknowledged by the team and industry.
- **Acronym:** Industry used acronym. ATD-2 should adopt any existing acronym and be consistent with any new ones.
- **Description:** Accurate definition of the data element/term.
- **Source:** What source documents referenced/defined this data element/term
- **System Mapping:** States which ATD-2 systems use this data element/term, where it can be found in that system, and the coded variable name that is used. For example: *In SYSTEM XYZ located in PQR as actual_variable_name_ABC.* List for each system that uses the data element/term.

Note: Airport resource capacity is defined according to the type of resource. For some resources, capacity is defined as a rate (e.g., runways) while for other resources capacity is defined as a number of aircraft that can occupy the resource at a given time (e.g., holding areas). (TFDM)

Use the links below to quickly navigate to a section. Clicking **Top** from within the table navigates back to this location.

A | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | **J** | **K** | **L** | **M** | **N** | **O** | **P** | **Q** | **R** | **S** | **T** | **U** | **V** | **W** | **X** | **Y** | **Z**

Data Element/Term	Acronym	Description	Source	System Mapping
A				**Top**
Active-MQ		Apache's open source implementation of Java Messaging Service (JMS) 1.1 as part of the J2EE (Java Enterprise Edition) 1.4 specification. This is the communication mechanism used by Flight Management Connector (FMC).		
Actual Arrival Fix Crossing Time		Time arrival crosses the arrival fix.	S-CDM	Strategic Scheduler (DRM/DRC)
Actual In-Block Time	AIBT	Time a flight has reached its gate or parking stand. Aircraft surface surveillance may provide this data.	S-CDM	Strategic Scheduler (DRM/DRC)

Data Element/Term	Acronym	Description	Source	System Mapping
Actual Landing Time	ALDT	Time the arriving aircraft lands. Flight Operators may provide actual landing time.	S-CDM	Strategic Scheduler (DRM/DRC)
Actual Movement Area entry Time	AMAT	Time the flight moves off the spot and moves into the AMA.	S-CDM, TFDM	Strategic Scheduler (DRM/DRC)
Actual Off-Block Time	AOBT	Actual time reported by Flight Operator for gate pushback or ready to taxi from parking stand. Airport Aircraft Surface Surveillance may provide AOBT. The time when an aircraft pushes back from its assigned gate or parking location, or when it commences movement with the intent to taxi for departure. AOBTs are provided from external sources, from RTC pushback clearances, and the model detecting pushback based on track data. On test systems, all of these are used as possible sources. On the operational system at CLT, only use the second two.	S-CDM ATD-2 Lexicon	Strategic Scheduler (DRM/DRC)
Actual Queue Length		Number of aircraft in departure queue.	S-CDM	
Actual Takeoff Time	ATOT	Time a flight becomes airborne from the up-line airport. Flight Operators may provide actual takeoff time or TRACON automation may provide this data.	S-CDM	Strategic Scheduler (DRM/DRC)
Adaptation		The process by which automation application software is made unique to provide the required service at a specific site.	ATD-2 Lexicon	
Adaptation Data		A term describing a set of adaptable parameters. Geographic data (e.g., maps, airport location, radar site locations, fix, and airway data), aircraft characteristics, design parameters, and initial conditions are included in adaptation data.	TFDM	Airport Resource Management

Data Element/Term	Acronym	Description	Source	System Mapping
Adaptation Type		Refers to whether an adaptation parameter is system-wide or site-specific a. The system-wide adaptation parameters defined for a specific system design allow a single software build/baseline to service all terminal sites. b. The site-specific adaptation parameters defined for a specific system design allow a single system software build/baseline to be customized for operation at any site.	TFDM	Airport Resource Management
Air Traffic Control (ATC) Flight State		The current status of the flight with respect to controller actions to the EFS.	TFDM	
Airborne		An aircraft is considered airborne when all parts of the aircraft are off the ground.	ATD-2 Lexicon	
Aircraft Equipment Type		Type of equipment and weight class associated with a specific flight number. Will be considered during the assignment of Target Movement Area entry Times (TMAT).	S-CDM	
Aircraft Location (AMA and non-movement area)		Physical location of the aircraft with necessary flight information.	S-CDM	
Aircraft Stand		A designated area on an apron intended to be used for parking an aircraft. The following codes are used for the type of stands: • ANG_NI – Angled nose-in parking position • ANG_NO – Angled nose-out parking position • ISOL – Isolated parking position • NI – Nose-In parking position • OTHER – Other • PARL – Parallel (to building) parking position • RMT – Remote parking position.	TFDM	Airport Resource Management

Data Element/Term	Acronym	Description	Source	System Mapping
Aircraft Tail/ Registration Number		Alphanumeric string that uniquely identifies an aircraft.	S-CDM	
Airport Acceptance Rate; Airport Arrival Rate	AAR	A dynamic input parameter specifying the number of arriving aircraft which an airport or airspace can accept from the ARTCC per hour. The AAR is used to calculate the desired interval between successive arrival aircraft. (TFDM) Expected arrival rate for the entire airport and the time periods that the rate will be in effect. (S-CDM)	TFDM, S-CDM	Airport Resource Management
Airport Acceptance Rate Schedule	AAR Schedule	Within the time (start time to end time) for the current airport or a scheduled airport configuration, a schedule of one or more AARs. The AAR schedule fully covers the time of the airport configuration, so that at any time between the start and end time for the airport configuration there is exactly one AAR.	TFDM	Airport Resource Management
Airport Configuration		The information that includes the active runways and their use for arrivals and/or departures, nominal runway assignment rules (runway fix mapping), airport surface holding areas, and associated nominal surface resource capacities and rates (including flow direction information). Nominal values are stored in the adaptation and are used for planning purposes, such as after a configuration change has been scheduled or during what-if modeling. Upon implementing a configuration, nominal values are updated as needed to reflect current conditions. Final "called" capacities and rates (AAR and ADR), will be provided in real-time based on demand and meteorological	TFDM, S-CDM	Airport Resource Management

Data Element/Term	Acronym	Description	Source	System Mapping
		information and collaboration with overlying facilities (TRACON, ARTCC, Air Traffic Control System Command Center (ATCSCC).		
Airport Configuration Prediction Model	ACPM			
Airport Configuration Schedule		A schedule of one or more airport configurations. The first airport configuration in the airport configuration schedule is the current airport configuration (i.e., the airport configuration that is active at the current time). If there is only one airport configuration in the airport configuration schedule, then that airport configuration is considered to be active for the full-time horizon of the system. If there is more than one airport configuration in the airport configuration schedule, then those after the first one (i.e., after the current airport configuration) are scheduled airport configurations. Each scheduled airport configuration includes the user-specified time that the system assumes the airport configuration will be implemented (i.e., become the current configuration). Scheduled airport configurations are ordered by their scheduled times. Scheduled airport configurations are added to the airport configuration schedule by the user. Scheduled airport configurations become the current configuration based on user input; they do not automatically become the current configuration at their scheduled time.	TFDM	Airport Resource Management
Airport Controlled Holding Resources		Number by individual pad or a single number for the entire airport.	S-CDM	Airport Resource Management

Data Element/Term	Acronym	Description	Source	System Mapping
Airport Departure Rate	ADR	A dynamic TFM operational parameter specifying the number of aircraft which can depart an airport and the airspace can accept per hour. (TFDM) Expected departure rate for the entire airport and the time periods that the rate will be in effect. Used in conjunction with Single Airport Queue modeling. (S-CDM)	TFDM, S-CDM	Airport Resource Management
Airport Departure Rate Schedule	ADR Schedule	Within the time (start time to end time) for the current airport or a scheduled airport configuration, a schedule of one or more ADRs. The ADR schedule fully covers the time of the airport configuration, so that at any time between the start and end time for the airport configuration there is exactly one ADR.	TFDM	Airport Resource Management
Airport Departure Utilization		The ratio of the number of flights that departed the airport to the airport's departure rate (ADR).	TFDM	Airport Resource Management
Airport Metering Model		Defines the method that the automation models the surface operations. Indicates single airport queue or multiple runway queues metering, whereby both current and future parameter values can be established. When metering to a single airport queue, all departures taxiing in the AMA are considered to be part of the queue.	TFDM, S-CDM	Surface Modeler - DRM/DRC
Airport Movement Area	AMA	Taxiways, runways, and other areas of an airport where vehicle and aircraft movement is typically managed and controlled by ATC. Areas under the ATCT's jurisdiction are typically composed of runways and taxiways. Aircraft and vehicles in operational AMAs must be in contact with and receive	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		permission or clearance from Air Traffic Control (ATC), based on the type of movement occurring, to operate in the AMA.		
Airport Non-Movement Area	NMA	Taxiways and apron (ramp) areas not under the control of air traffic.	Pilot/ Controller Glossary	
Airport Operating Conditions		An ATC parameter that defines the meteorological conditions at the airport, e.g., visual meteorological conditions, marginal visual meteorological conditions, and instrument meteorological conditions.	TFDM	TFDM SWIM
Airport Resource Constraints		Limitations on the use of an airport resource. Examples of constraints include equipment that cannot use the resource or a shortened runway due to construction.	TFDM	Airport Resource Management
Airport Resource Schedule		A schedule of airport resource states (e.g., open/closed) for each airport resource. The first element in each airport resource schedule is the current state of that resource. If there is only one element in the airport resource schedule then that airport resource state is considered to be active for the full time horizon of the system. If there is more than one element in the airport resource schedule, then those after the first one (i.e., after the current airport resource state) are scheduled airport states. Each scheduled airport state includes the user-specified time that the system assumes the airport resource will be implemented (i.e., become the current state). Scheduled airport resource states are ordered by their scheduled times. Scheduled airport resource states are added to the airport resource schedule by the user.	TFDM	Airport Resource Management

Data Element/Term	Acronym	Description	Source	System Mapping
		Scheduled airport resource states become the current resource state based on user input; they do not automatically become the current resource state at their scheduled time.		
Airport Surface Constraints		Notices to Airmen and impact statement indicating airport surface constraints (including planned and unplanned runway and taxiway closures). ATCT may provide this information.	S-CDM	Airport Resource Management
Airspace Flow Program	AFP	A Traffic Management (TM) process administered by the Air Traffic Control System Command Center (ATCSCC) where aircraft are assigned an Expect Departure Clearance Time (EDCT) in order to manage capacity and demand for a specific area of the National Airspace System (NAS). The purpose of the program is to mitigate the effects of en route constraints. It is a flexible program and may be implemented in various forms depending upon the needs of the air traffic system.	Pilot/ Controller Glossary	
Amendment Messages		A message to modify, add to, or delete previously filed flight plan data.	TFDM	
Approval Request/Call for Release Time	APREQ	Controlled departure time associated with required inter- or intra-facility coordination. FAA Order JO 7110.65 definition - 'Approval Request'. A request from one controller to another, generally via voice circuit, requesting permission to issue an instruction or clearance or to request a non-standard operation.	S-CDM ATD-2 Lexicon	Strategic Scheduler (DRM/DRC)
APREQ Flights Exempt from Metering		Indicates that APREQ flights will be exempt from departure metering on a per APREQ basis. The default setting is that APREQ flights	S-CDM	Surface Modeler - DRM/DRC

Data Element/Term	Acronym	Description	Source	System Mapping
		will be included in departure metering. A reason for the exclusion must be provided		
Arrival Fix		Arrival fix associated with flight plan Standard Terminal Arrival Route (STAR) or Preferred Arrival Route (PAR).	S-CDM	DRM/DRC
Arrival Flights in Terminal Airspace (Number)		Number of arriving flights from the arrival fix to the landing runway.	S-CDM	
Arrival Flights in Terminal Airspace (Time)		Flight times of arrivals from the arrival fix to the runways.	S-CDM	
Arrival Ramp Transit Time	Arrival RTT	Actual taxi time from the arriving flight exiting the AMA until reaching the assigned gate or parking stand.	S-CDM	
Arrival Runway Assignment Rule		A rule for a particular airport configuration that determines the default runway assignment for each arrival. Rules can be based on such things as arrival fix, aircraft weight class, parking gate, etc.	TFDM	Airport Resource Management
Arrival Runway Assignment Rule Schedule		Within the time (start time to end time) for the current airport or a scheduled airport configuration, a schedule of one or more arrival runway assignment rules. By default, the arrival runway assignment rule schedule for an airport configuration consists of the default arrival runway assignment rule; The user can edit the arrival runway assignment rule schedule. The first arrival runway assignment rule becomes active when the airport configuration becomes active. Any subsequent arrival runway assignment rules in the arrival runway assignment schedule each have a scheduled time, but they only become active based on user input; they do not automatically become active	TFDM	Airport Resource Management

Data Element/Term	Acronym	Description	Source	System Mapping
		at their scheduled time. When the current airport configuration changes the arrival runway assignment rule schedule for the previous airport configuration is discarded. When an airport configuration is removed from the airport configuration schedule the arrival runway assignment rule schedule for that configuration is discarded.		
Arrival Stand		The stand at which an aircraft arrives at the destination airport on completion of the flight. This data element is associated with the AIXM "Aircraft Stand" data element.	TFDM	Airport Resource Management
Assigned Departure Runway		Flight-specific assignment provided by ATC of which runway a flight will use to depart.	TFDM	
At Gate		A flight state where an aircraft is parked at the gate.	ATD-2 Lexicon	
Automatic Call For Release (CFR) Mode		In Automatic Mode, the TFDM system will automatically send an electronic request for a release time from TBFM when the flight meets a given set of user defined parameters (e.g., 10 minutes before a flight is scheduled to push back from the gate).	TFDM	Flight TMI Service
Availability		The probability that a system or constituent piece may be operational during any randomly selected instant of time or, alternatively, the fraction of the total available operating time that the systems or constituent piece is operational. A fraction whose numerator is the Mean Time Between Failures (MTBF) and whose denominator is the sum of the MTBF plus the Mean Time To Restore (MTTR) a service.	TFDM	

Data Element/Term	Acronym	Description	Source	System Mapping
Average Delay		Average metering delay of flights with SOBTs within 15 minutes of a specific flight's SOBT.	S-CDM	
Average Metering Hold		Average metering hold incurred by flights nearby a specific flight. It is the average of metering holds of flights within the same DMP that have Initial Off Block Times (IOBTs) within 15 minutes of a specific flight's IOBT. It is used to calculate metering times for an unscheduled flight or for a flight no longer affected by a ground stop, ramp closure, or route closure.	TFDM	Surface Modeler - DRM/DRC
Average Metering Hold Threshold		Configurable percentage of change in metering hold time associated with a rejected DMP required to generate a new recommended DMP.	TFDM, S-CDM	Surface Modeler - DRM/DRC
B				**Top**
Bay		Display area for grouping of EFSs for flights meeting the same flight state/flight condition.	TFDM	EFD
Baseline		The initial configuration of any item (including software, hardware, requirements and documentation) which is formally designated and managed by a unique identifier and which is "frozen" at a specific time during the configuration items life cycle. The baseline, plus any approved changes, constitutes the current configuration.	ATD-2 Lexicon	
Bird Advisories		Information about bird activity (location, altitude, and type, if known). PIC and/or Airport Operator may report bird activity.	S-CDM	ARM
Block Time		The time between blocking out at the origin airport and blocking in at the destination airport.	TFDM	

Data Element/Term	Acronym	Description	Source	System Mapping
Blocked In		The state of an aircraft being parked at a stand.	TFDM	
Blocked Out		The state of an aircraft being not parked at a stand. Traditionally, the block out event was marked by the removal of the chocks from the wheels, allowing the aircraft to be pushed, or move under its own power, away from its stand.	TFDM	
Blocking Departure Runway		An option associated with each runway and when set indicates that priority flights must wait in the runway queue before departing.	S-CDM	Surface Situational Display
Blocking vs. Non-Blocking		The Blocking vs. Non-blocking setting communicates the ATCT's ability and willingness to taxi the priority flights to the front of the departure lineup to the automation. In the blocking case, the priority flight cannot taxi to the front of the departure queue without waiting in the queue. In the non-blocking case, the priority flights can taxi to the runway without first taxiing through the departure queue.	TFDM	Traffic Flow Data (TFD)
C				**Top**
Call for Release (CFR)	CFR	Wherein the overlying ARTCC requires a terminal facility to initiate verbal coordination to secure ARTCC approval for release of a departure into the en route environment.	TFDM	Surface Modeler - DRM/DRC
Call For Release (CFR) Flights Exempt from Metering		Indicates that CFR flights will be exempt from departure metering on a per program basis. The default setting is that CFR flights will be included in departure metering. A reason for the exclusion must be provided.	TFDM	Surface Modeler - DRM/DRC
Call For Release (CFR) Time Window		The window of time that a CFR flight would be compliant. The beginning of the CFR time window is the earliest runway time that a	TFDM	Surface Modeler - DRM/DRC

Data Element/Term	Acronym	Description	Source	System Mapping
		CFR flight is considered compliant.		
Call for Service Time		The time that the pilot requests clearance to taxi. This request may or may not require verbal communication.	S-CDM	Strategic Scheduler (DRM/DRC)
Carrier Substitution Permissions		Intra-operator metering time substitution requests, where major carriers can substitute their own flights as well as designated subcarrier flights according to the same substitution rights applied for EDCT substitution.	TFDM	DRM/DRC
Chart Change Update	CCU	The charts are the Jeppesen maps that define the US airspace. They publish new versions of these maps every 56 days (or every 28 days now) and all the ATC people, all the pilots, etc. get the new pile of documents. The effect for ATD-2 is that the FAA publishes new versions of all the Center adaptations, many of which affect TBFM, therefore new TBFM adaptation files.	Jeppesen Maps	TBFM
Cold Start		Re-initializing software and hardware by powering the system hardware off, then on.	ATD-2 Lexicon	
Collaborative Trajectory Options Program	CTOP	A traffic management program administered by the Air Traffic Control System Command Center (ATCSCC) that manages demand through constrained airspace, while considering operator preference with regard to both route and delay as defined in a Trajectory Options Set (TOS).	Pilot/Controller Glossary	
Combine as One		Relates to departure fix close/combine, but “as one” is slightly different. The flights are not flying the true flight plan route, but controllers are treating them as one fix. The fixes are technically both shut down,		

Data Element/Term	Acronym	Description	Source	System Mapping
		but not really shut down – they are combined as one, usually due to weather that is moving through the area. The flight plan is not amended in this case.		
Compliance		An indication of whether a flight has departed within a specified period of the assigned departure time (EDCT, Controlled Time of Departure (CTD)).	ATD-2 Lexicon	
Compression Automatic Affirmation		Configurable option to allow for automatic affirmation of a Recommended DMP Compression.	TFDM, S-CDM	Surface Modeler - DRM/DRC
Compression Minimum TMAT Adjustment Time		Configurable value set by the DRC and applicable to all Flight Operators, is used to increase the stability of TMATs during compression. It prevents multiple small adjustments to a flight's TMAT from occurring by requiring that any updated TMAT must differ from the prior TMAT by more than the Compression Minimum TMAT Adjustment Time. If an adjustment to an existing TMAT would be less than the Compression Minimum TMAT Adjustment Time the TMAT is left unchanged. (TFDM) Configurable value set by the DRC in collaboration with local Stakeholders that specifies the minimum amount of TMAT time reduction that Flight Operators prefer during a compression DMP. (S-CDM)	TFDM, S-CDM	Surface Modeler - DRM/DRC
Computer Identification number	CID	This is a distinct number assigned to each flight plan that is in the FAA system. ATC can use that number to make changes to the fight plan.		
Control State		Flight data ownership or (results of) manipulation of flight data by user or system.	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
Controlled Take-Off Time	CTOT			
Controlled Time of Departure Buffer	CTD Buffer	A configurable DMP Parameter that may be applied to flights with EDCTs and assigned CFR times to provide additional time to account for the uncertainty that exists in surface operations and reduce the risk of missing the EDCT or CFR. (TFDM) Additional time provided to departures with a controlled time of departure. (S-CDM)	TFDM, S-CDM	DRM/DRC
Controller-Pilot Data Link Communication (CPDLC) Service Status		CPDLC service status represents information regarding the data communications service, including the current operational status of the service within the tower and specific TDLS settings, including Automode.	TFDM	STBO-Comm Manager
Convective Lightning Strike Indicator activation		Time interval (typically 15 minutes) that begins when lightning is observed within a specified distance of the airport.	S-CDM	ARM and Flight TMI service
Credit		A numerical value awarded to an individual flight as a part of a Data Quality metric for providing accurate and/or timely information. Each Data Quality metric has a maximum number of credits that can be awarded to an individual flight. The total number of credits awarded to a flight for each applicable Data Quality metric is used to calculate an overall Data Quality metric value for the flight.	TFDM	
Cumulative Adjustment		A DMP adjustment that includes multiple DMP adjustments of the same or different types. When a cumulative adjustment is recommended, the individual adjustment will become superseded.	TFDM	DRM/DRC

Data Element/Term	Acronym	Description	Source	System Mapping
Current Airport Configuration		The airport configuration that is active at the current time. The current airport configuration determines such things as the active departure and arrival runways, the active runway assignment rules, and the runway and airport arrival rates. There is always a current airport configuration. The current airport configuration is selected from among the airport configurations in the system adaptation. The user can modify certain airport configuration default values from the adaptation, such as the runway and airport arrival rates and the active runway assignment rules.	TFDM	Airport Resource Management
D				**Top**
Data		Values of qualitative or quantitative variables, belonging to a set of items. Data may include individual facts, statistics, or items of information.	ATD-2 Lexicon	
Data Field		A single data element or a combination of data elements that is presented to the user for viewing and manipulation or to the computer programmer for manipulation.	ATD-2 Lexicon	
Data Element		A unit of data for which the definition, identification, representation, and permissible values are specified by means of a set of attributes. A logical unit of data that is, generally, indivisible.	ATD-2 Lexicon	
DCC		Common abbreviation for the FAA Air Traffic Control System Command Center (ATCSCC).		
De-icing		De-icing occurs with heavy precipitation, true snow, actual ice, or a backup of the process. The Ramp sends a TMC to the Tower to work	Shadow Session	

Data Element/Term	Acronym	Description	Source	System Mapping
		with Ground Control, and sends all flights out to Spot 12, or similar. The Ramp calls Ground, who coordinates with the Ramp TMC in the Tower, and sends the flight to one of the deicing pads. The flight won't know the runway assignment exactly until they come out of deicing.		
De-icing Target Queue Length		Size of the de-icing queue for a specific de-icing pad.	S-CDM	
De-icing Target Queue Length Lower Threshold		Lower threshold for de-icing target queue length.	S-CDM	
De-icing Target Queue Length Upper Threshold		Upper threshold for de-icing target queue length.	S-CDM	
De-icing Throughput Rate		Estimated de-icing throughput rate (for each de-icing resource) used to predict demand/capacity imbalances for each de-icing resource	S-CDM	
Defrosting		When the de-icing process is moving quickly, and the Ramp assigns a de-icing pad directly.	Shadow Session	
Delayed Flight		When a flight's EOBT is updated to a later time by the flight operator.	TFDM	
Demand		The set of flights that are scheduled to use the airport resources.	TFDM	Airport Resource Management
Demand/Capacity Imbalance		When the queue length for a metering resource is predicted to exceed the target queue length's upper threshold for that metering resource.	TFDM	Airport Resource Management
Demarcation Line		Moveable line on a bay that restricts a paired bay's ability to manipulate EFSs below the line.	TFDM	EFD
Departure Clearance		Clearance received from an ATC position. This clearance may communicate the route of flight, transponder code, altitudes, and frequencies to	TFDM	

Data Element/Term	Acronym	Description	Source	System Mapping
		the aircraft/pilot. This clearance may be delivered via voice or automation.		
Departure Clearance Messages	DCL	The DCL service is a "request/reply" service. The air crew in the cockpit submits a data link request to the ATSP and requests a departure clearance message. The aircraft has to be equipped with avionics that are capable of utilizing the protocol for DCL and the airline's crews have to be able to utilize the DCL message from the terminal facility. DCL is a planned service in TDLS.	TFDM	Flight TMI Service
Departure Constraints		Time and duration (if known) when a departure fix is closed or when an in-trail restriction (miles or minutes) is required over a specific departure fix or flow. The ATC facility responsible for implementing the restriction should ensure the information is updated. ATCSCC validates restrictions but does not implement them.	S-CDM	DRM/DRC
Departure Delay		Departure delay is the difference in time from when a flight was originally scheduled to depart versus when it actually departs.	ATD-2 Lexicon	
Departure Fix		Airspace resource that flights plan their departure over. This resource is often identified at a facility boundary.	TFDM	DRM/DRC
Departure Fix Closure		No flights are going to the closed fix. Closures are fluid and dynamic. When there's a fix closure, traffic is split from that one fix to at least two fixes, so the fixes are not overloaded. This results in two MIT situations over the new fixes.	Shadow Session	
Departure Fix Combine		Combining the traffic from two fixes over one fix always results in a MIT situation.	Shadow Session	

Data Element/Term	Acronym	Description	Source	System Mapping
		Rules that apply to the flight going to the original fix are inherited by the new departure fix.		
Departure Fix Queue Percentage		A DMP parameter that ensures the number of flights in a metered departure queue over the same departure fix, departure fix group, or Like Routes at the same time should not exceed this configurable percentage of the queue when flights from other departure fixes are available.	TFDM, S-CDM	Surface Modeler - DRM/DRC
Departure Instruction Information		The set of airport adaptation data including by not limited to local departure procedures, departure frequencies, initial altitudes, Ground Control frequencies, and any other local information that TFDM will maintain and use for PDC and DCL clearance processing. Depending on the facility, departure instruction information may be linked to predefined airport configurations.	TFDM	Airport Resource Management
Departure Metering Program	DMP	A traffic flow management initiative to provide controlled departure times in order to manage flows of one or multiple airports to/over defined points in the airspace. This initiative is managed by the Time-Based Flow Management (TBFM) automation system (currently EDC, Integrated Departure/Arrival Capability (IDAC) in "To-Be" Operations)).	TFDM	DRM/DRC
Departure Ramp Transit Time	Departure RTT	Actual taxi time from pushback from the gate or taxi from parking stand until reaching the spot.	S-CDM	Tactical Scheduler
Departure Readiness Status		Indication that the flight is ready for pushback.	S-CDM	
Departure Reservoir Coordinator	DRC	The role which typically decides when departure metering should be in effect,	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		based on the queue length predictions provided by the Improve Shared Situational Awareness to Collaboratively Optimize Airport Capacity functionality. This role is responsible for managing the departure queue by setting the DMP Parameter values in collaboration with Stakeholders.		
Departure Reservoir Manager	DRM	The function, which contains the algorithms, parameters, and real-time data models that provide the situational awareness and decision support capabilities of Surface Collaborative Decision Making (Surface CDM).	ATD-2 Lexicon	
Departure Route		The route of flight out of a particular airport, including the flight path an aircraft takes from the runway to the departure fix or departure gate.	TFDM	
Departure Runway Assignment Rule		A rule for a particular airport configuration that determines the default runway assignment for each departure. Rules can be based on such things as departure fix, aircraft weigh class, parking gate, etc.	TFDM	Airport Resource Management
Departure Runway Assignment Rule Schedule		Within the time (start time to end time) for the current airport or a scheduled airport configuration, a schedule of one or more departure runway assignment rules. By default, the departure runway assignment rule schedule for an airport configuration consists of the default departure runway assignment rule; the user can edit the departure runway assignment rule schedule for the current or a scheduled airport configuration. The first departure runway assignment rule becomes active when the airport configuration becomes	TFDM	Airport Resource Management

Data Element/Term	Acronym	Description	Source	System Mapping
		active. Any subsequent departure runway assignment rules in the departure runway assignment schedule each have a scheduled time, but they only become active based on user input; they do not automatically become active at their scheduled time. When the current airport configuration changes the departure runway assignment rule schedule for the previous airport configuration is discarded. When an airport configuration is removed from the airport configuration schedule the departure runway assignment rule schedule for that configuration is discarded.		
Departure Runway Utilization		The ratio of the number of flights that departed a given runway to the runway's departure rate (RDR).	TFDM	Airport Resource Management
Departure Scenario		Defined use of the runways at a more detailed level than the specified airport configuration. (Same as Runway Utilization.)	Shadow Session	
Departure Scheduler		Enables uninterrupted taxi/climb trajectories in all traffic conditions; its objective is to minimize variability in OFF time and time to Top of the Climb (TOC) with the goal of minimizing taxi time, fuel burn and emissions, while maximizing airport/runway throughput and sequence traffic into the overhead stream. The Departure scheduler concept can be divided into two categories: Strategic: develop a virtual queue at the runway (departure sequence) and allow stakeholders to make changes through CDM process. The scheduler will optimize the sequence until		

Data Element/Term	Acronym	Description	Source	System Mapping
		a preset freeze time is reached. Tactical: optimize departure sequence using real-time (actual) information after the freeze time.		
Departure Stand		The stand from which an aircraft departs on commencement of the flight. This data element is associated with the AIXM "Aircraft Stand" data element.	TFDM	Airport Resource Management
Departure Stop	DS	A traffic management initiative that manages demand by stopping all departures out of a particular airport or TRACON.		
Departure Target Queue Length		Number of departures in the departure queue considered optimal for the local airport during metering. The DRC is expected to coordinate initial values with all Stakeholders, and maintains the authority to amend as appropriate to reflect current airport surface operations. • Multiple runway metering mode - all flights lined up for departure at the end of the runway or behind a flight lined up for departure at the end of the runway are considered to be in the queue for that runway. • Single airport metering mode - all flights in the movement area with intent to depart are considered to be in the departure queue.	TFDM, S-CDM	Surface Modeler - DRM/DRC
Departure Target Queue Length Lower Threshold		Number of departures (aircraft) in the departure queue below the departure target queue length used to determine the need for compression or termination of a DMP. The DRC is expected to coordinate initial values with all Stakeholders, and maintains the authority	TFDM, S-CDM	Surface Modeler - DRM/DRC

Data Element/Term	Acronym	Description	Source	System Mapping
		to amend, as appropriate, to reflect current airport surface operations.		
Departure Target Queue Length Upper Threshold		Number of departures (aircraft) in the departure queue above the departure target queue length used to determine the need for a DMP and reassignment of TMATs.	TFDM, S-CDM	Surface Modeler - DRM/DRC
Departures in Terminal Airspace (Number)		Number of departures in terminal airspace from airborne until handoff to en route facility (may reflect when the flight reaches its initial departure fix) within a specific time period.	S-CDM	
Departures in Terminal Airspace (Time)		Amount of time departures are in terminal airspace from airborne time until handoff to en route facility (may be when the flight reaches the initial departure fix) within a specific time period.	S-CDM	Metroplex Coordinator
Designated Metering Resource	DMR	An airport resource that may be metered and is designated to be monitored for metering through the local adaptation. Metering Resources include Airport as a single queue, departure runways, a de-icing resource, and in-trail restricted resources, such as a departure fix, departure fix group, destination airport, or jet route with an in-trail restriction.	TFDM	
DMP Adjustment Affirmation		Includes the type of DMP adjustment and the time it was affirmed. For compressions, will indicate whether affirmation was by DRC or automatic.	S-CDM	DRM/DRC
DMP Adjustment State		The state of an Adjustment to a Departure Metering Program that can be one of the following: • Proposed - Automation has proposed the DMP adjustment, but no DRC action has been taken.	TFDM	DRM/DRC

Data Element/Term	Acronym	Description	Source	System Mapping
		• Deferred - Automation has proposed the DMP adjustment, and the DRC has deferred it. • Obsolete - The automation at one point proposed the DMP adjustment, but is no longer proposing it. • Expired - The proposed or deferred DMP adjustment was never acted on by the DRC. • Superseded - The adjustment has been merged with another adjustment to form a cumulative adjustment. • Rejected - The DRC has rejected the DMP adjustment. • Affirmed - The DRC has affirmed the DMP adjustment.		
DMP Affirmation Time		Time that DRC affirms a recommended DMP.	S-CDM	DRM/DRC
DMP Deferral Lead Time		Configurable length of time before a proposed DMP start time within which a DMP can longer be deferred.	TFDM, S-CDM	DRM/DRC
DMP Lead Time		Time in advance of a DMP that Stakeholders desire notification of a recommended DMP.	TFDM, S-CDM	DRM/DRC
DMP Rejection Time		Time that DRC rejects a recommended DMP.	S-CDM	DRM/DRC
DMP State		The state of a Departure Metering Program that can be one of the following: • Proposed - Automation has proposed the DMP, but no DRC action has been taken. • Deferred - Automation has proposed the DMP, and the DRC has deferred it. • Obsolete - The automation at one point proposed the DMP, but is no longer proposing it. • Expired - A proposed or deferred DMP was	TFDM	DRM/DRC

Data Element/Term	Acronym	Description	Source	System Mapping
		never acted on by the DRC. • Rejected - The DRC has rejected the DMP. • Affirmed - The DRC has affirmed the DMP but it is not yet active. • Active - The DMP has been affirmed and current time is between the start and end time of the DMP. • Completed - An active DMP has finished (current time after DMP end time).		
E				**Top**
Earliest Feasible Takeoff Time	EFTT	The earliest time an aircraft could take off from its assigned runway based on the flight operator provided EOBT, plus the expected ramp transit time, taxi time and time spent (if any) in the runway queue.	TFDM	Strategic Scheduler (DRM/DRC)
Earliest Off-Block Time	EOBT	The earliest time when the Flight Operator plans for an aircraft to push back from its assigned gate or commence movement from its parking location with the intent to taxi, in the absence of metering. The Flight Operator (Airline) will be responsible for providing a current EOBT for a planned departure. At least one airline does have an algorithm that uses LOBT as input along with a lot of other inputs to compute EOBT. Most other airlines are just copying LOBT into the EOBT field.	S-CDM, TFDM	Strategic Scheduler (DRM/DRC)
Earliest Runway Time of Departure	ERTD	Flight Operator's estimate of runway departure time not including any traffic management initiatives. Thus, it is a projection of Non-TMI aircraft wheels up time.		
EDCT Compliance Window		The window of time that an EDCT flight would be	TFDM	Flight TMI Service

Data Element/Term	Acronym	Description	Source	System Mapping
		compliant. The beginning of the EDCT compliance window is the earliest runway time that an EDCT flight is considered compliant.		
Electronic Flight Data	EFD	A function that integrates data from multiple systems and stakeholders and provides an electronic means of coordination with Air Traffic.	TFDM	EFD
Electronic Flight Strip (EFS) Formats		Arrangement of data elements displayed on the EFS.	TFDM	EFD
Electronic Flight Strip (EFS) Status		EFS status means clearance for movement as represented by the position of the EFS and/or state as set by the Next Logical Action. The intent is to alert the controller that the attempted action would create a conflict. Examples would be attempting to set a flight as cleared for takeoff when the preceding flight is in a LUAW state.	TFDM	EFD
Electronic Flight Strip (EFS) Transfer		The transfer of an EFS to a different window on the same display, another operational position (CD to GC, etc.), external facility (ATCT to TRACON) or printer.	TFDM	EFD
Electronic Flight Strip (EFS) Transfer Configuration		The configurations required for the transfer of an EFS to a different window on the same display, another operational position (CD to GC, etc.), external facility (ATCT to TRACON) or printer.	TFDM	EFD
Electronic Flight Strip (EFS) Types		Different EFSs (e.g., Departure EFS, Arrival EFS, Local EFS).	TFDM	EFD
En Route Automation Modernization	ERAM	ERAM is an FAA computer system that processes flight and surveillance data, provides communications, and generates display data to air traffic controllers. ERAM replaced a legacy	FAA ERAM Fact Sheet ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		system and is in use at 20 FAA Air Route Traffic Control Centers nationwide.		
Estimated Arrival RTT		Estimated taxi time from the spot to the arrival gate or parking stand.	S-CDM	
Estimated Departure RTT		Estimated taxi time from the gate or parking stand to the spot.	S-CDM	
Estimated Gate De-icing End Time		Estimated time that a flight that de-ices at the gate will finish de-icing. At some airports the Flight Operator may provide this information.	S-CDM	
Estimated Gate De-icing Start Time		Estimated time that a flight that de-ices at the gate will begin de-icing. At some airports the Flight Operator may provide this information.	S-CDM	
Estimated Time of Arrival	ETA	Estimated time the flight is expected to arrive at the destination airport. This is the first scheduled ETA for the flight.	S-CDM	Strategic Scheduler (DRM/DRC)
Exact Substitution		A TMAT substitution is called an exact substitution when the later flight can assume the earlier flight's TMAT without receiving a TOBT that is earlier than its EOBT.	TFDM	DRM/DRC
Existing and forecast weather conditions		(Currently there is no single authoritative source for weather information. Until this is determined, Stakeholders will obtain weather information from a variety of sources.)	S-CDM	ARM
Expect Departure Clearance Time	EDCT	The runway release time assigned to an aircraft in a traffic management program and shown on the flight progress strip as an EDCT.	TFDM	Flight TMI service
Extension Evaluation Interval (TFDM)/Frequency (S-CDM)		Interval at which the need to extend a DMP that is already in effect is evaluated. Unit of measurement is minutes.	TFDM, S-CDM	Surface Modeler - DRM/DRC
External Interface		A connection to data or control instructions, which originate outside an	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		application or system boundary.		
F				**Top**
FAA Air Traffic Facilities		FAA Air Traffic Facilities include all air traffic facilities operated by the FAA. This includes: Airport Traffic Control Towers (ATCT), Terminal Radar Approach Control (TRACON), Air Route Traffic Control Center (ARTCC), and Air Traffic Control System Command Center (ATCSCC).	ATD-2 Lexicon	
Filed Flight Plans		Flight information which may include remarks “DVRSN”, “LIFEGUARD,” or other priority information.	S-CDM	
First-Come, First-Served	FCFS			
First-Scheduled, First Served	FSFS			
Fix		A geographical position determined by visual reference to the surface, by reference to one or more radio NAVAIDS, by celestial plotting, or by another navigational device.	TFDM	DRM/DRC
Fix and Navigation Aid Constraint (NAVAID) and Limitations		NOTAM information concerning arrival or departure fixes, NAVAIDs, or instrument procedures (including impact and duration).	S-CDM	DRM/DRC
Flight Cancellation		Flights cancelled after flight plans have been entered in the system.		
Flight Data		Flight data is any information related to a flight. It will vary in the context, such as ATCT, TRACON, ARTCC, ATCSCC, flight operator, flight operations center, and even customer service applications.	TFDM	

Data Element/Term	Acronym	Description	Source	System Mapping
Flight Intent		Flight intent information providing common situational awareness about a specific flight. • AMA Pad De-ice • Ramp Pad De-ice • Gate De-ice • Hold in Ramp until (time) • Hold in AMA until (time) • Gate Return • Pushback Time	S-CDM	
Flight Location (Airborne)		Location information for airborne aircraft.	S-CDM	
Flight Management Connector	FMC	Is a sub-process which uses active-mq to send and receive updates to flight data and airport configuration information. This is how updates to flight data are sent between processes.		
Flight Number	ACID	Call Sign, Flight Identifier	S-CDM	
Flight Operator		A person or organization responsible for operating an aircraft. Flight operator types include airline, general aviation, military, cargo, and others. Flight operator may refer to any entity within the above types of organizations, such as a Flight Operations Center, dispatcher, or pilot-in-command.	ATD-2 Lexicon	
Flight Operator Delay		Delays that are caused by the Flight Operator (i.e., maintenance issues, missing paperwork, weight balance issues)	TFDM	Tactical Scheduler
Flight Operator Initiated Metering Time Changes		When a metering time assigned to a flight is changed due to any of the following reasons: a. metering time substitution, or b. when a flight's EOBT is updated to be later than its TOBT.	TFDM	DRM/DRC
Flight Operator System		The system(s) used by the Flight Operators to exchange data or communicate with	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		external systems or internally.		
Flight Plan		Specified information relating to the intended flight of an aircraft that is filed orally or in writing with a Flight Service Station (FSS) or an ATC facility.	TFDM	
Flight Plan Timeout		An adaptable amount of time at which a flight plan is deemed to be inactive.	TFDM	
Flight State		The current flight condition based on a variety of data sources, including surveillance data, flight data, flight operator data, and user input. This condition is required to consider various types of data including, but not limited to, Aircraft State on Surface, Resource Readiness Indications received from flight operators, and Clearances Issued State. Flight states can include: Proposed, Cleared, Gate Hold, At Gate, Off-Block, Taxi, In Queue, Airborne.	TFDM	
Flight Status		Inferred flight status based on flight data or surveillance information. Some values might be: • Clearance – PDC sent/ received • Boarding – First ticket scanned • Ready – Main cabin door closed and aircraft ready for pushback • Pushback • Taxi • Line-up • No Route Available List • Ramp Closure List	S-CDM	
Flight Strip Status		The statuses that denote the current usage and restrictions on a given flight strip, such as No ATC, ESP, STOP, and SWAP.	TFDM	Traffic Flow Data
Flight Suspension Time		Configurable length of time after the Flight Suspension	S-CDM; TFDM	DRM/DRC

Data Element/Term	Acronym	Description	Source	System Mapping
		Warning notification indicating that if no action is taken the TMAT will be reclaimed and the flight will be removed from the demand list.		
Flight Suspension Warning Time		Configurable length of time after the initial Missed TMAT notification indicating that if no action is taken by a specified time the TMAT will be reclaimed and the flight will be removed from the demand list.	S-CDM; TFDM	DRM/DRC
Flights Affected Threshold		Configurable percentage of flights affected associated with a rejected DMP required to generate a new recommended DMP.	S-CDM; TFDM	DRM/DRC
Flights Exempt from Rationing		A subset of flights that, if included in a DMP, receive metering times that are controlled by external restrictions or special rules as opposed to RBS principles. For instance, flights with assigned EDCTs or Diversion Recovery flights.	TFDM	DRM/DRC
Flights Subject to Rationing		Rationable Flights are a subset of flights that, if included in a DMP, receive metering times that are calculated based on Ration By Schedule (RBS) principles. Flights in a DMP are either rationable or exempt from rationing.	TFDM	DRM/DRC
Flow Evaluation Area / Flow Constrained Area	FEA/FCA	Flow Evaluation Area (FEA) / Flow Constrained Area (FCA) - FEA/FCAs provide reroutes using the Create Reroute capability and are published through a reroute advisory with an optional flight list attached. Stakeholders can monitor FEA/FCAs through reroute monitor in traffic situation display (TSD), web situation display (WSD) or collaborative constraint situation display (CCSD).	FAA ATCSCC	

Data Element/Term	Acronym	Description	Source	System Mapping
Full Route Clearance	FRC	Used by pilots to request that the entire route of flight be read verbatim in an ATC clearance. Such request should be made to preclude receiving an ATC clearance based on the original filed flight plan when a filed IFR flight plan has been revised by the pilot, company, or operations prior to departure.	TFDM	Flight TMI Service
Future Departure Target Queue Length		Number of departures in the departure queue considered optimal for a specific time in the future.	S-CDM	DRM/DRC
Future Departure Target Queue Length Lower Threshold		Number of departures in the departure queue below the departure target queue length set for a future time period used to determine the need for a DMP compression or termination.	S-CDM	DRM/DRC
Future Departure Target Queue Length Start Time		Time the future departure target queue length goes into effect.	S-CDM	DRM/DRC
Future Departure Target Queue Length Upper Threshold		Number of departures in the departure queue above the departure target queue length set for a future time period used to determine the need for a DMP or reassignment of TMATs.	S-CDM	DRM/DRC
G				**Top**
Gate Assignment		Gate that flight is assigned to.	S-CDM	
Gate Capacity		Total number of gates available by Flight Operator based on wing clearance/ gauge of aircraft.	S-CDM	Airport Resource Management
Gate Conflict		A gate conflict is predicted when a gate assigned to an arriving flight is still occupied by a departing flight. Controllers need this information before the flight is on final approach, to allow a TMC time to change the arrival runway and potentially improve the situation on the ground, thus improving overall efficiency.	TFDM	Surface Modeler

Data Element/Term	Acronym	Description	Source	System Mapping
Gate Hold		A flight state (parameter) where the flight is ready to depart, but is being held at the gate.	ATD-2 Lexicon	
General Aviation	GA	"General Aviation" is a broad category which includes all civil aviation except scheduled airline service and paid cargo flights.		
Ground Delay Program	GDP	Ground Delay Programs (GDP) are implemented to control air traffic volume to airports where the projected traffic demand is expected to exceed the airport's acceptance rate for a lengthy period of time. Lengthy periods of demand exceeding acceptance rate are normally a result of the airport's acceptance rate being reduced for some reason. The most common reason for a reduction in acceptance rate is adverse weather such as low ceilings and visibility. Flights that are destined to the affected airport are issued Controlled Departure Times (CDT) at their point of departure. Flights that have been issued CDTs are not permitted to depart until their Controlled Departure Time. These CDTs are calculated in such a way as to meter the rate that traffic arrives at the affected airport; ensuring that demand is equal to acceptance rate. The length of delays that result from the implementation of a Ground Delay Program is a factor of two things; how much greater than the acceptance rate the original demand was, and for what length of time the original demand was expected to exceed the acceptance rate.	FAA	
Ground Stop	GS	Flights that are destined to the affected airport are held at their departure point for the duration of the Ground Stop. Ground Stops are	FAA	

Data Element/Term	Acronym	Description	Source	System Mapping
		implemented for a number of reasons. The most common reasons are: • To control air traffic volume to airports when the projected traffic demand is expected to exceed the airport's acceptance rate for a short period of time. • To temporarily stop traffic to allow time for the implementation of a longer-term solution, such as a Ground Delay Program. • The affected airport's acceptance rate has been reduced to zero.		
H				**Top**
I				**Top**
Impact Assessment		Computerized evaluation of the implications of a Terminal Area event (Weather, Runway closure, etc.) resulting in a reduction of capacity for the Terminal Area concerned. This term also qualifies the quantification of the capacity reduction when such an event occurs.	ATD-2 Lexicon	
In Queue		A flight state that indicates that a flight has taxied to its assigned runway and is awaiting take off clearance	TFDM	
In-trail Restricted Resource		Any resource such as departure fix, departure fix group, jet route, or destination airport that is restricted by a Miles-In-Trail or Minutes-In-Trail restriction.	TFDM	Flight TMI Service
Inactive Bay		Bay used to hold EFSs representing flights that are being tracked by the TFDM system but are not actively being controlled by the ATCT or not actively progressing toward takeoff or final parking. E.g., Ground	TFDM	EFD

Data Element/Term	Acronym	Description	Source	System Mapping
		Control (GC) might use an inactive bay to hold the EFSs of flights that have received their clearances, but not yet contacted GC for taxi.		
Inexact Substitution		An inexact TMAT substitution is needed when a Flight Operator wishes to substitute a later flight with an earlier one, but the later one cannot move early enough to make use of the earlier flight's TMAT. In this case, the earlier flight assumes the TMAT assigned to the later flight and the later flight is assigned a TMAT with zero metering hold.	TFDM	DRM/DRC
Information Security		The protection of information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction in order to provide confidentiality, integrity, and availability.	ATD-2 Lexicon	
Initial Off-Block Time	IOBT	IOBT is the first EOBT received from a flight operator. IOBT (initial) - This is the first Off Block Time known to the system (received from a flight operator). It never changes once set. If the flight is scheduled, IOBT = SOBT. But if the flight is unscheduled, like a GA flight, then the first time we will find out about the flight is when they file a flight plan. In that case, IOBT = POBT (P for Proposed). There are a couple of other edge cases that can set IOBT to the LOBT, but those are rarer.	TFDM	Strategic Scheduler (DRM/DRC)
Instrument Meteorological Condition	IMC	IMC is an aviation flight category that describes weather conditions that require pilots to fly primarily by reference to instruments, and therefore under instrument flight rules (IFR),		

Data Element/Term	Acronym	Description	Source	System Mapping
		rather than by outside visual references under visual flight rules (VFR).		
Integrity		Guarding against improper information modification or destruction, and includes ensuring information non-repudiation and authenticity.	ATD-2 Lexicon	
Intent		Information on future aircraft behavior or controller action as it relates to the EFS.	TFDM	EFD
Intent Data		The next logical action of a flight based on a controller's action.	ATD-2 Lexicon	
Interface		A point of interaction between components, and is applicable at the level of both hardware and software.	ATD-2 Lexicon	
J				**Top**
Java Messaging Services	JMS	A Java Message Oriented Middleware (MOM) API for sending messages between two or more clients. JMS is a part of the Java Platform, Enterprise Edition, and is defined by a specification developed under the Java Community Process as JSR 914. It is a messaging standard that allows application components based on the Java Enterprise Edition (JEE) to create, send, receive, and read messages. It allows the communication between different components of a distributed application to be loosely coupled, reliable, and asynchronous.		
K				**Top**
L				**Top**
Latest Gate Time of Departure	LGTD	The flight's pushback time as given by the airline as part of a CDM message. Used as a	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		surrogate for EOBT, if EOBT has not been provided.		
Line Up and Wait Clearance	LUAW	Used by ATC to inform a pilot to taxi onto the departure runway to Line Up and Wait. It is used when takeoff clearance cannot immediately be issued because of traffic or other reasons.	TFDM	Traffic Flow Data
Local EFS		A flight strip that is generated for use within a single air traffic facility that will not be entered into NAS transmission facilities.	ATD-2 Lexicon	
Long On Board	LOB	The time that passengers have been aboard a flight on the surface. For departures, the timer starts counting at door close and ends at take-off. For arrivals, the timer starts counting at touchdown and ends when the door opens at the gate. Maximum allowed is three hours.	Shadow Session	
Latest-Off Block Time	LOBT	Also known as L-Time. Most airlines use this to display the flight times on the screen at the airports. In addition, it is provided by the Airlines. Prior to EOBT, LOBT was the best information on when the flight would pushback from the gate.		
M				**Top**
Maintainability		A characteristic of design and installation that is expressed as the probability that an item will be retained in, or restored to a specified condition within a given period of time, when the maintenance is performed in accordance with prescribed procedures and resources.	ATD-2 Lexicon	
Manage Airport Resource (MAR) Operational Data		This data includes Airport Configuration, Open/Close Status for Airport Resource, and Traffic Count.	TFDM	Airport Resource Management
Manipulate		The user’s ability to move, as well as call attention to, a	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		strip (e.g., off-setting or flipping).		
Manual CFR Mode		In Manual Mode, a controller or other TFDM user in the ATCT will request a release time from TBFM by user input.	TFDM	Flight TMI Service
Marked for Substitution		An indication from the flight operator that a flight should be handled by the automation in a certain manner. A flight that is marked for substitution is assigned a metering time based on its IOBT priority without consideration of the fact that it could be assigned a metering time that causes the flights TOBT to be earlier than its EOBT.	TFDM; S-CDM	DRM/DRC
Mean Time Between Failures	MTBF	A basic measure of reliability. MTBF is the average time between failures of a system or system components.	ATD-2 Lexicon	
Mean Time to Repair	MTTR	A basic measure of maintainability. It is the sum of corrective maintenance times (required at any specific level of repair) divided by the total number of failures experienced by an item that is prepared at that level, during a particular interval, and under stated conditions. The MTTR is an inherent design characteristic of the equipment. Traditionally, this characteristic represents an average of the number of times needed to diagnose, remove, and replace failed hardware components. In effect, it is a measure of the extent to which physical characteristics of the equipment facilitate access to failed components in combination with the effectiveness of diagnostics and built in test equipment.	ATD-2 Lexicon	
Memory Jogger EFS		An EFS containing static text and can be manipulated in	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		the same ways as other EFSs.		
Metering (Departure, Arrival, and Surface)		A method of time-regulating departure, arrival, and surface traffic flow into and out of a terminal area, so as not to exceed a predetermined airport capacity.	Pilot/Controller Glossary	
Metering Control Point		The location where a flight's compliance toward its metering time is measured. Spot, for flight metered in a non-de-icing DMP or Movement area entry, for flights that pushback directly into AMA, or holding area exit for flights that intend to hold in AMA.	TFDM	Surface Modeler
Metering Hold		Amount of time a metered flight is expected to wait before pushing back in order to meet its metering time. The difference between a flight's EOBT and TOBT.	TFDM	
Metering Time		See TMAT	TFDM	Strategic Scheduler (DRM/DRC)
Miles-In-Trail	MIT	Specified separation distance in miles between sequential flights over a specified fix. One type of Traffic Management Initiative used to balance demand and capacity.		
Minimum Turnaround Time	MTT	The minimum amount of time needed to prepare an arriving flight for a subsequent departure.	S-CDM	
Minutes-In-Trail	MINIT	Specified separation time in minutes between sequential flights over a specified fix. One type of Traffic Management Initiative used to balance demand and capacity.		
Missed Departure Opportunities	MDO	Number of missed departure opportunities. (S-CDM) A metric addressing the potential risk for overly aggressive metering to result in wasted runway slots. In	S-CDM, ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		order to determine the degree to which such “runway starvation” occurs within a simulation run, metered departure flights that enter an empty queue are analyzed. Comparison of the earliest feasible runway entry time to the time at which the aircraft entered an empty queue provides an estimate of the excess delay incurred by that flight and thus a measure of the degree of over-control asserted by DRM. Analysis of the frequency of such “missed departure opportunity” events as well as their duration serves as an indicator of the degree to which DRM’s advisories are resulting in runway starvation. (ATD-2 Lexicon)		
Multiple Runway Queue Metering Mode		One of the options to model the surface scheduling and metering. In this mode, each departure runway is modeled as a single-server queue with service rate equal to each runway's RDR. Only the flights predicted to use that runway are included in the schedule.	TFDM	Tactical Scheduler
N				**Top**
Network		Information system(s) implemented with a collection of interconnected components. Such components may include routers, hubs, cabling, telecommunications controllers, key distribution centers, and technical control devices.	ATD-2 Lexicon	
No Route Available	NRA	A route approval status that indicates that the current filed flight plan is not acceptable, a change is necessary, and no acceptable change can be identified at the present time.	TFDM	Traffic Flow Data
No Route Available List		A list used by automation in order to maintain an	TFDM	Traffic Flow Data

Data Element/Term	Acronym	Description	Source	System Mapping
		accurate prediction of departure demand. The User will be responsible for adding a flight to the No Route Available List when these three conditions are all met: • The planned route is unavailable. • There is no estimated end time for the route closure. • The flight cannot accept another route. If a reroute becomes available or the route reopens, the flight will be removed from the No Route Available List by either the ATC or the automation.		
Non-De-icing DMP		DMP for any metering resource except de-icing resources. Non-deicing DMPs include Airport DMP, Runway DMP, In-Trail Restricted DMP.	TFDM	DRM/DRC
Notification		A display element that aids the user in discerning information on the display and may communicate additional information to the user. Notifications include alarms, alerts, and prompts.	ATD-2 Lexicon	
Notification Subscription		Indicates stakeholders who have subscribed to a notification.	S-CDM	DRM/DRC
O				**Top**
Off-Block		A flight state where a flight has pushed back from the gate.		
Operational Information System	OIS	The OIS is a web page managed by the Air Traffic Control System Command Center (ATCSCC) that provides current information (real time) to customers about the status of the National Airspace System (NAS).		
Operational Necessity	OpNec			

Data Element/Term	Acronym	Description	Source	System Mapping
Operational Position		An ATC position staffed by an ATC specialist.		
Operational Requirement		Requirements that identify essential user capabilities needed to address known mission area deficiencies and shortfalls.		
Operationally Validated Concepts	OVC	Operationally Validated Concepts synonymous with Minimally Viable Products (MVP)		
P				**Top**
Pilot Weather Reports	PIREPS	Reports of meteorological phenomena encountered by an aircraft in flight.	TFDM	Flight TMI Service
Planned and Unplanned Security Events		Includes location on the airport and impact to operations.	S-CDM	Airport Resource Management
Planned Departure Fix		Initial departure fix filed with route of flight information.	S-CDM	
Planned Spot		Location where departures contact ATCT for taxi	S-CDM	
Planning Horizon		Configurable amount of time within which flights expected to depart could be assigned metering times.	S-CDM; TFDM	DRM/DRC
Pre-Departure Clearance	PDC	Initial departure clearance provided by Tower Data Link Services (TDLS) platform to the Airline Operations Center (AOC) or Flight Operations Center (FOC), which then delivers the clearance to the flight deck prior to the aircraft pushing back.	TFDM; S-CDM	DRM/DRC
Predicted Arrival RTT		Predicted ramp transit time from the time the flight leaves the movement area until it reaches the gate or parking location.	S-CDM	
Predicted Departure RTT		Predicted ramp transit time which encompasses pushback and taxi in the ramp from gate or parking stand to the spot.	S-CDM	
Predicted Queue Waiting Time		Predicted average amount of time flights will spend in queue.	S-CDM	

Data Element/Term	Acronym	Description	Source	System Mapping
Predicted Spot Arrival Time		Predicted spot arrival time for a flight.	S-CDM	Strategic Scheduler (DRM/DRC)
Predicted Taxi Time (Arrivals)		Predicted amount of time from exiting the landing runway until exiting the AMA proceeding to the gate or parking stand.	S-CDM	
Predicted Taxi Time (Departures)		Predicted taxi time from the spot to the departure queue.	S-CDM	
Preference Settings (add specific data elements in this category)		Provides the user the ability to save, store, and apply certain display, parameter, and formatting settings each time the system is accessed.	TFDM	DRM/DRC
Portability		The ability of a computer program to be ported from one system to another. Software portability, the portability of a piece of software to multiple platforms.	ATD-2 Lexicon	
Probability of Extension		Probability of a DMP needing a recommended extension. One of the following enumerated values: high, medium, or low.	S-CDM; TFDM	DRM/DRC
Process		An executing program.	ATD-2 Lexicon	
Prompt		A type of notification providing suggestions or notice of a change in value, which is not time critical and/or not safety-related.	ATD-2 Lexicon	
Proposed Flight		A flight state where a flight has not yet contacted any tower position, yet flight information exists in automation systems.	ATD-2 Lexicon	
Proposed Off Block Time	POBT	Also known as P-Time to most people. This is the departure time that is in the filed flight plan. If the flight is on-time, POBT = SOBT. But it can be later if the flight is severely delayed. It is almost never updated once it is set. POBT is the time shown on the ATC flight strip by default.		

Data Element/Term	Acronym	Description	Source	System Mapping
Protection Period		Locally agreed upon time that a Flight Operator has to substitute a delayed or canceled flight before the automation reclaims the allocated capacity.	S-CDM; TFDM	DRM/DRC
Q				**Top**
Queue		The line or sequence of aircraft for a designated airport resource at any given time. It can apply to all kinds of metering resources, such as a departure runway, an arrival runway, a departure fix, or a de-icing resource and/or a constraint or restriction such as an EDCT, TMI, etc.	ATD-2 Lexicon	
Queue Length		The number of aircraft in the line or sequence for a designated airport resource at any given time. The predicted queue length is the number of flights that are modeled to have entered the queue, but not departed the queue, at any given time.	TFDM	Strategic Scheduler (DRM/DRC)
Queue Waiting Time		Time a flight occupies a queue. The difference between the time a flight enters a queue and the time that it leaves the queue.	TFDM	
R				**Top**
Ramp		An area designated for loading or unloading aircraft with passengers and/or cargo, and may include gates or parking stands, aircraft, and vehicles. Ramps are either controlled or uncontrolled. A controlled ramp is one in which movement in the ramp is typically controlled by a designated ramp operations, which may be a Flight Operator, Airport Operator, or third party. At some airports, pushback from the gates is handled by ATC, especially at locations where aircraft push back directly into the Active Movement	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		Area (AMA). An uncontrolled ramp is one where aircraft push back from a gate and move within the ramp at the discretion of the pilot, avoiding other aircraft or vehicles.		
Ramp Closure		Closure of the ramp due to lightning in the vicinity. Warning lights are used to indicate distance to observed lightning, and are updated in 15 minute increments.	Shadow Session	
Ramp Closure Time		Time that a particular ramp or number of ramps are closed. At some locations, the Airport Operator may provide this information.	S-CDM	Strategic Scheduler (DRM/DRC)
Ramp Holding Area Entry Time		Time a flight enters a ramp holding area.	S-CDM	Strategic Scheduler (DRM/DRC)
Ramp Holding Capacity		Number of aircraft a ramp area is able to hold. For GA/BA ramps the Airport Operator may provide this information.	S-CDM	Airport Resource Management
Ramp Reopen Time		Time that a particular ramp is expected to reopen. At some locations, the Airport Operator may provide this information.	S-CDM	Strategic Scheduler (DRM/DRC)
Ramp Taxi Time	RTT			
Ramp Transit Time	RTT			
Ration By Schedule (RBS) Priority		Priority of flights in order to receive a metering allocation. RBS priority for a flight is initially given by its IOBT, but if a flight is substituted for another in a manual substitution (Substitution requested by Flight Operators after TMATs are assigned), the flights exchange RBS priority.	TFDM	DRM/DRC
Rationable Flights		Or Flights Subject to Rationing, are a subset of flights that, if included in a DMP, receive metering times that are calculated based on Ration By Schedule (RBS)	TFDM	DRM/DRC

Data Element/Term	Acronym	Description	Source	System Mapping
		principles. Flights in a DMP are either rationable or exempt from rationing.		
Reassignment of TMATs Minimum TMAT Adjustment Time		Configurable value set by the DRC in collaboration with local Stakeholders that specifies the minimum amount of TMAT time reduction that Flight Operators prefer during a reassignment of TMATs. (S-CDM) Configurable value set by the DRC and applicable to all Flight Operators, is used to increase the stability of TMATs during reassignment of TMATs. It prevents multiple small adjustments to a flight's TMAT from occurring by requiring that any updated TMAT must differ from the prior TMAT by more than the Reassignment of TMATs Minimum TMAT Adjustment Time. If an adjustment to an existing TMAT would be less than the Reassignment of TMATs Minimum TMAT Adjustment Time, the TMAT is left unchanged. (TFDM)	S-CDM; TFDM	DRM/DRC
Recall		To get or bring back data recently deleted or recently archived.	ATD-2 Lexicon	
Reclaimed Metering Time		Cancel a flight's metering time. When a metering time is reclaimed, the automation would consider that metering time available so it could be assigned to other flights.	TFDM	DRM/DRC
Reclamation Window		Period of time measured from the current time forward beyond which the DRM Capability will not act on a canceled or delayed flight to reclaim capacity. (S-CDM) Period of time measured from the current time forward beyond which the automation will not act on a canceled or delayed flight to reclaim capacity. Also used	S-CDM; TFDM	DRM/DRC

Data Element/Term	Acronym	Description	Source	System Mapping
		to send flight reclamation warning notification. (TFDM)		
Reconfiguration		The action of changing the state or interconnection of resources.	ATD-2 Lexicon	
Reconstitute		A software recovery function that restores data to a software application after a failure, to bring it to current or near current operational state.	ATD-2 Lexicon	
Relative Trajectory Cost	RTC	RTC is the cost (in minutes) to fly the TOS route as compared to the original route. The RTC is used as a threshold value used to determine when an alternative TOS route becomes more advantageous to fly than the original route.		
Release Time		A departure time restriction issued to a pilot by ATC (either directly or through an authorized relay) when necessary to separate a departing aircraft from other aircraft. The runway time assigned to an Approval Request (APREQ) flight.	TFDM	Strategic Scheduler (DRM/DRC)
Release Time Window		An interval of time during which a flight that has a controlled departure time, for example, CFR, or EDCT, must depart.	TFDM	
Reliability		The degree, often expressed as Mean Time Between Failures (MTBF), that a system or component would perform a required function under specific conditions for a specified period of time.	TFDM	DRM/DRC
Remote Monitoring and Logging System	RMLS	A functionality for system monitoring, failure alarm and report, control for the system at unmanned locations, and support for system certification, automated	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		logging, and configuration management.		
Requested Runway		Runway requested due to performance limitations of the aircraft". This will be an optional data element that will overwrite the automation's fix-to-runway mapping for the specified flight.	S-CDM	
Resource Readiness Indication		Indication from a flight operator of the readiness of a flight (CDM/Surface CDM). Indications have not been determined at this time, but could include: boarding, boarded, doors closed, etc.	TFDM	
Restore		To bring back or re-instate the system or archived data.	ATD-2 Lexicon	
Retrieve		To get or bring back active operational data.	ATD-2 Lexicon	
Revised	REV	A route approval status determined by the ARTCC during flight plan/route review that indicates that a change was necessary to the current filed flight plan. In DSP, this is indicated by a yellow color which is displayed on all DSP displays.	ATD-2 Lexicon	
Route Approval Status		Status of a filed route of flight; formerly called Clearance Status or Cleared Status Indicator (CSI) in DSP, which includes: • Cleared as Filed (CAF) • Gate Hold (GH) • No Route Available (NRA) • Not Read (NR) • Revised (REV) • Route Available (RA) • Terminal En Route Control (TEC)	TFDM, ATD-2 Lexicon	
Runway Arrival Rate	RAR	Expected arrival rates for each available runway and the time periods that each rate will be in effect. Important for mixed use runway operations. (S-CDM)	S-CDM, TFDM	Airport Resource Management

Data Element/Term	Acronym	Description	Source	System Mapping
		Number of arrivals per hour on a single arrival runway and the time period each rate will be in effect. Each arrival runway in a given configuration can have a different runway arrival rate. (TFDM)		
Runway Arrival Rate Schedule	RAR Schedule	Within the time (start time to end time) in the current airport or a scheduled airport configuration, a schedule for each arrival runway of one or more RARs. Each RAR schedule fully covers the time of the airport configuration, so that at any time between the start and end time for the airport configuration there is exactly one RAR for each arrival runway.	TFDM	Airport Resource Management
Runway Assignment (Arrivals)		Runway assignment for arriving flights.	S-CDM	
Runway Assignment (Departures)		Runway assignment for departing flights.	S-CDM	
Runway Change for Convenience		Taxi to a different runway for the good of one flight, but should be a blanket approval for others. Positive, collaborative activity existing today that still should be available within the new technology. Should specify start and end time (generally at beginning or end of a push). Will end when airport starts getting departures coming onto the center runway.	Shadow Session	
Runway Change for Efficiency		Taxi to a different runway for the good of everyone (e.g., decide to send an aircraft headed for a certain fix off a different runway, change runway because the original runway was all backed up, etc.) Typically decision made by the FAA for the efficiency of the overall airport.	Shadow Session	

Data Element/Term	Acronym	Description	Source	System Mapping
Runway Change for Operational Necessity		The airline ramp tower may change a flight's currently assigned runway to the longest runway (Rwy 18C/36C at CLT), due to operational/load/weather reasons or pilot comfort (if a pilot requests a runway change for operational necessity, it must be granted).	Shadow Session	
Runway Closure		A complete closure of a runway, meaning no arrivals and no departures. It could be used for taxi purposes, if it's not under construction. If a runway is closed, it's automatically closed in both directions.	Shadow Session	
Runway Crossing Queue Time		Time an arriving flight enters a queue to cross a runway until it is number one to cross or begins to cross the runway.	S-CDM	
Runway Departure Rate	RDR	The expected departure rates for each available runway and the time periods that each rate will be in effect. (S-CDM) Number of departures per hour from a single departure runway and the time period each rate will be in effect, assuming no “heavy” aircraft or other aircraft with special separation requirements are included. Each departure runway in a given configuration can have a different runway departure rate. (TFDM)	S-CDM, TFDM	Airport Resource Management
Runway Departure Rate Mismatch Threshold		Configurable percentage difference between the predicted and actual departure rate that triggers an RDR Mismatch Notification.	S-CDM	Airport Resource Management
Runway Departure Rate Schedule	RDR Schedule	Within the time (start time to end time) in the current airport or a scheduled airport configuration, a schedule for each departure runway of one or more RDRs. Each RDR schedule fully covers	TFDM	Airport Resource Management

Data Element/Term	Acronym	Description	Source	System Mapping
		the time of the airport configuration, so that at any time between the start and end time for the airport configuration there is exactly one RDR for each departure runway.		
Runway Load Balancing Rule		A rule which determines which departures can be moved from their default departure runway to an alternate departure runway (or runways) to balance departure runway loading. The rules identify both the flights eligible and the runway(s) to which each can be moved.	TFDM	DRM/DRC
Runway Surface Information		Runway surface information, to include any contamination affecting runway surface.	S-CDM	Airport Resource Management
Runway Throughput		The total number of operations (arrivals and departures) that the runway is expected to be able to accommodate during a single 60-minute period.	ATD-2 Lexicon	
Runway Utilization		Defined use of the runways at a more detailed level than the specified airport configuration. (Same as Departure Scenario.)	Shadow Session	
S				**Top**
Safety Alert		An actual situation involving two real safety logic tracks (aircraft/aircraft, aircraft/vehicle, or aircraft other tangible object) that safety logic has predicted will result in an imminent collision, based upon the current set of safety logic parameters.	ATD-2 Lexicon	
Safety Risk Management	SRM	Is a Process of Hazard identification, including identification of risks, mechanisms of hazards, and other safety weaknesses; Understand the safety behavior (human factors) and bureaucracy that influence safety; and. Development of control		

Data Element/Term	Acronym	Description	Source	System Mapping
		measures designed to mitigate exposure.		
Scheduled In-Block Time	SIBT	It is the time an arriving flights is scheduled to pull into the airport terminal gate and come to a complete stop		
Scheduled Off-Block Time	SOBT	Scheduled Off-Block Time provided by the Flight Operator. This is the time printed on the ticket and the time that you are looking at when you buy an airline ticket. And it is called "P-Time" on RTC.	TFDM, S-CDM	Strategic Scheduler (DRM/DRC)
Security Categorization		The process of determining the security category for information or an information system. See Security Category.	ATD-2 Lexicon	
Send		Point-to-point transmission from source to a single destination.	ATD-2 Lexicon	
Service		A set of functions or capabilities related to a specific context. A service can be considered a container of capabilities associated with a common purpose.	ATD-2 Lexicon	
Set		A method to change a value either via a free text entry or a selectable preset parameter. In order to set the value, it is assumed that the parameter for preset values has already been created by adaptation or manually entered.	ATD-2 Lexicon	
Shall		The word "shall" is specifically used whenever a specification expresses a provision that is binding or identifies a characteristic that a system shall possess in order to be acceptable to the acquirer.	ATD-2 Lexicon	
Single Airport Queue Metering Mode		One of the options to model the surface scheduling and metering. In this mode, the entire airport is modeled as a single-server queue. All	TFDM	DRM/DRC

Data Element/Term	Acronym	Description	Source	System Mapping
		scheduled departures from the airport are included in the demand. All departures in the AMA with intent to depart are considered to be in the queue.		
Spot		A location in the Ramp where aircraft enter and/or exit the AMA. For a departure, the spot marks the transfer of control from the Flight Operator, Airport Operator, or third party to ATC. For an arrival, the spot marks the transfer of control from ATC to Flight Operator, Airport Operator, or third party.	ATD-2 Lexicon	
Spot Arrival Time (Arrivals)		Time that an arriving flight leaves the AMA entering the non-movement area.	S-CDM	Strategic Scheduler (DRM/DRC)
Spot Arrival Time (Departures)		Time that a departing flight reaches the spot.	S-CDM	Strategic Scheduler (DRM/DRC)
Spot Queue Entry Time		Time a departure enters the queue of departures waiting to exit the ramp. Queue exit is inferred at the Spot Arrival Time	S-CDM	Strategic Scheduler (DRM/DRC)
Stakeholder		This term includes, but is not limited to, the following organizations and personnel: • FAA Air Traffic Organization, to include Air Traffic Field Facilities • Flight Operations Center, to include those people directly involved with aircraft operations • Pilot in Command • Ramp Control, to include gate management and other operational staff • Airport Operator, to include those responsible for construction and maintenance staff • De-icing Operator • General Aviation/Flight Service Providers, to include those responsible for issuing flight plans and	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		associated information to general and business aviation aircraft • Other Federal Agencies to include: o Department of Defense o Customs and Immigration o Department of Homeland Security o Transportation Security Administration		
Start of Taxi for Departure		Time that a flight begins final taxi for final departure regardless of location. Note: Intent information must be provided for flights holding in the AMA.	S-CDM	Strategic Scheduler (DRM/DRC)
State		See: Flight State.	ATD-2 Lexicon	
Static Time Horizon	STH	Configurable amount of time from current time (normally 30 minutes) used to limit TMAT changes to flights. An important component of assigning delay to unscheduled flights. (S-CDM) Configurable amount of time from current time used to limit TMAT changes to flights. An important parameter in assigning TMATs to unscheduled flights. (TFDM)	S-CDM; TFDM	DRM/DRC
Store		Information that is retained in such that it is readily available for use.	ATD-2 Lexicon	
Strikethrough		A horizontal line drawn through text.	ATD-2 Lexicon	
Subscribable Notifications		Notifications to which Stakeholders can elect to subscribe/unsubscribe. Not all notifications are un-subscribable for all Stakeholders. For example, receiving Demand/Capacity Imbalance notification is mandatory (un-subscribable)	ATD-2 Lexicon	

Data Element/Term	Acronym	Description	Source	System Mapping
		for DRC; but for ATC, it is a Subscribable notification.		
Substitution Request		Request to substitute one flight for another.	S-CDM	DRM/DRC
Surface Metering		A traffic flow management initiative to provide controlled pushback times in order to manage surface traffic to maintain constant pressure on runways and optimize departure queue lengths to gain efficiency for flight operators in terms of fuel consumption and time.	ATD-2 Lexicon	
Surface Situational Awareness Capability		A function that provides a common understanding among all stakeholders (e.g., TRACONs, ARTCCs, ATCSCC) of the surface situation, the predicted runway schedule, and modeling capabilities.	ATD-2 Lexicon	
Surface Surveillance Data		The set of system messages received from either the ASDE-X or ASSC System(s), which contain the position of a track on the surface along with associated flight plan data.	ATD-2 Lexicon	
Surface Surveillance Track		The ASDE-X/ASSC derived position of an aircraft or vehicle on the surface, considering all surveillance data sources and history.	ATD-2 Lexicon	
Surveillance Data		The set of system messages received from either a surface/airborne surveillance or automation system, which contains data describing the position of a target. May also include associated flight plan data.	ATD-2 Lexicon	
System Wide Information Management	SWIM	The System Wide Information Management (**SWIM**) Program is a National Airspace System (NAS)-wide information system that supports Next Generation Air Transportation System (NextGen) goals. **SWIM** facilitates the data sharing requirements for NextGen,	FAA	

Data Element/Term	Acronym	Description	Source	System Mapping
		providing the digital data-sharing backbone of NextGen.		
SWIM Cloud Distribution Service	SCDS	SCDS is publicly accessible cloud-based infrastructure dedicated to providing real-time SWIM data to the public via Solace JMS Messaging.	SWIM User Forum 2019	
System State		The state of a system with respect to the health of the system, including operational status.	ATD-2 Lexicon	
T				**Top**
Takeoff Clearance		Clearance received from a tower position responsible for local control activities. This clearance communicates approval to depart the aircraft.	TFDM	Tactical Scheduler
Target		The indication shown on a display resulting from a primary radar return or a radar beacon reply.	ATD-2 Lexicon	
Target De-Icing Queue entry Time	TDQT	Time assigned to flight to enter the de-icing queue when a De-Icing Operator requests metering (DRM) assistance.	S-CDM	Strategic Scheduler (DRM/DRC)
Target Landing Time	TLDT	(It has not been determined which Stakeholder would provide this data.)	S-CDM	Strategic Scheduler (DRM/DRC)
Target Movement Area entry Time	TMAT	A metering time assigned to flights that are subject to any DMP except de-icing DMP. (TFDM, S-CDM) The procedures for a Time-Based DMP involve the assignment of movement area entry times to each flight departing while metering is in effect. These times are referred to as Target Movement Area entry Times (TMATs). When Ramp Control and the Pilot in Command (PIC) plan and conduct pushback and taxi operations in the ramp to meet the TMAT, it is not expected or necessary that each flight will exactly meet	TFDM, S-CDM	Strategic Scheduler (DRM/DRC)

Data Element/Term	Acronym	Description	Source	System Mapping
		the TMAT. Therefore, a TMAT Window of a specified amount of time both before and after the specific TMAT will be used to evaluate TMAT compliance by the Flight Operator. If the flight crosses into the movement area within this specified time window, then the flight will be considered compliant. The TMATs the DRM assigns are calculated to establish and maintain the departure queue at its target length by having a flight enter the departure queue at the same time another flight leaves the queue through a runway departure. (ATD-2 Lexicon)		
Target Off-Block Time	TOBT	Target time to push back from a gate or taxi from parking stand for a flight to make its TMAT. (S-CDM) The suggested time the flight should push back from the gate in order to meet its TMAT. The difference between a flight's TOBT and its EOBT is its assigned gate hold. (ATD-2 Lexicon)	S-CDM	Strategic Scheduler (DRM/DRC)
Target Queue Entry Time	TQET	The time the system is targeting for a flight to enter the queue, in order to maintain the queue at the Target Queue Length. It is a time internal to the automation which is used to derive the TMAT for rationable flights.	TFDM	Strategic Scheduler (DRM/DRC)
Target Queue Length	TQL	Number of aircraft expected to be in queue. (S-CDM) A DMP parameter that represents the Stakeholders' view of the optimal number of flights that should be in the queue in consideration of operational events. This parameter provides a balance between the desire to minimize the time waiting in the departure queue and to ensure that ATC will have enough flights available to	S-CDM	Strategic Scheduler (DRM/DRC)

Data Element/Term	Acronym	Description	Source	System Mapping
		maximize throughput. (ATD-2 Lexicon)		
Target Queue Length Time Interval		Time period for which the associated Target Queue Length is to be in effect and may consist of multiple future DMP parameters.	S-CDM	Strategic Scheduler (DRM/DRC)
Target Takeoff Time	TTOT	The predicted takeoff time of a metered flight. The prediction should take into account all available information such as TMAT, predicted taxi times, RDR, and other departure demand. No compliance is associated with this time. TTOT implies no recommended sequence to ATC.	S-CDM	Strategic Scheduler (DRM/DRC)
TDQT Compliance Window		Window around the TDQT within which flights are considered compliant.	S-CDM	DRM/DRC
Template		Point for new flight data entry. When you open the template, it is preformatted with specific data fields identified to be populated.	ATD-2 Lexicon	
Terminal En Route Control	TEC	A route approval status that denotes that a flight is planned on a route below center airspace.	ATD-2 Lexicon	
Timeout		Discarding of flight data from various automation systems after a parameter amount of time without receipt of a departure message (DM).	TFDM	DRM/DRC
TMAT Compliance Window		Window around the TMAT within which flights are considered compliant.	TFDM, S-CDM	DRM/DRC
Track		The actual flight path of an aircraft over the surface of the earth.	ATD-2 Lexicon	
Traffic Flow Management	TFM	The regulation and organization of air traffic in order to expedite the stream of aircraft in a holistically efficient manner.		
Traffic Management Initiative	TMI	This is a generic term referring to actions taken by ATC personnel to manage	TFDM	Flight TMI Services

Data Element/Term	Acronym	Description	Source	System Mapping
		air traffic (e.g., volume, spacing, routes). This term can refer to the following initiatives: • Ground Stop (GS) • Departure Stop (DS) • Ground Delay Program (GDP) • Airspace Flow Program (AFP) • Collaborative Trajectory Options Program (CTOP) • Miles-In-Trail (MIT) • Minutes-In-Trail (MINIT) • Capping • Tunneling • Metering (Departure, Arrival, and Surface) • APREQ (Call for Release) These actions are currently captured in the National Traffic Management Log (NTML).		
Traffic Management Initiative (TMI) Revision Start Time		Time that a TMI Revision is actually implemented.	S-CDM	Strategic Scheduler (DRM/DRC)
U				**Top**
UDB Placeholder Flights/UDB parameters		To provisionally reserve capacity for unscheduled flights, the TFDM System shall generate placeholder flights internal to the automation based on the UDB parameter values to be included in the demand for each departure runway. Number of UDB placeholder flights decay over time based on historical data and is independent of the unscheduled flights becoming known during the operations. The TFDM System shall update the UDB placeholder flights by removing and regenerating them at frequent time intervals.	TFDM	
Undelayed Landing Time	ULDT			

Data Element/Term	Acronym	Description	Source	System Mapping
Undelayed Take-Off Time	UTOT			
Unimpeded Demand		Reflects all demand in the schedule without any reduction by departure metering or surface congestion.	TFDM	Airport Resource Management
Unimpeded Flight Time		The flight time in non-congested conditions.	TFDM	
Unimpeded Off Block Time	UOBT	UOBT should be the earliest that the flight can pushback in the absence of a TOBT. TOBT is almost always greater than or equal to UOBT. But there are a few edge cases were TOBT will be in the past. UOBT is normally equal to the EOBT if the EOBT is set. If there is no EOBT, then LOBT; if no LOBT, then flight plan departure time (POBT); if no POBT, then SOBT; if no SOBT; then IOBT. If no IOBT; then it falls into some other logic that is almost never used.		
Unimpeded Taxi Time		The taxi time in non-congested conditions at airports.	TFDM	
Unmetered Queue Length		Unmetered queue length during metering is the predicted length of the queue for a resource if there was no metering program in effect.	TFDM	Strategic Scheduler (DRM/DRC)
Unscheduled Demand Buffer	UDB	Number of unscheduled flights identified as potential demand by hour (historical or predicted) for the entire airport. UDB parameter is a table (matrix) listing the average number of unscheduled flights during each hour of the day that are expected to become known during that hour and each of the following hourly time bins. (TFDM) Types of factors that may be considered when calculating default UDB parameter	TFDM, S-CDM	DRM/DRC

Data Element/Term	Acronym	Description	Source	System Mapping
		values are historical rates of unscheduled flights, seasonal trends in unscheduled flights, weekly trends in unscheduled flights, etc. (TFDM)		
Unscheduled Flight		A flight that becomes known to the system as a departure from the current airport after a DMP is affirmed for a metering resource that the flight is predicted to use.	TFDM	DRM/DRC
Unscheduled Flights Lower Threshold		Number of unscheduled flights which, if below the UDB, triggers an Unscheduled Flights Low notification.	TFDM, S-CDM	DRM/DRC
Unscheduled Flights Upper Threshold		Number of unscheduled flights which, if exceeds the UDB, triggers an Unscheduled Flights High notification.	TFDM, S-CDM	DRM/DRC
User		Any person, entity, or organization that may interact with an object or system. This includes those who input, process, retrieve, use, rely upon, or add value to the object or system.	ATD-2 Lexicon	
User Input		Human interaction with the system (e.g., keyboard entry, mouse/trackball selection, touch-screen gesture). In a requirement, the text "based on user input" indicates that human interaction with the system.	ATD-2 Lexicon	
User Preference Sets		Stored values of display set-up parameters individualized for a specific user that can be retrieved and applied.	TFDM	
Universal Time Coordinated	UTC	UTC is the time provided in world-wide time signal broadcasts used in aviation.	ATD-2 Lexicon	
V				**Top**
Visual Meteorological Condition	VMC	VMC is an aviation flight category in which visual flight rules (VFR) flight is permitted—that is, conditions in which pilots have sufficient visibility to fly the aircraft		

Data Element/Term	Acronym	Description	Source	System Mapping
		maintaining visual separation from terrain and other aircraft.		
W				**Top**
Warm Start		Re-initializing the hardware and software on a system without powering the hardware off.	ATD-2 Lexicon	
Weather Reroutes		Reroutes initiated by ATC due to en route weather. ATCSCC will be part of the planning to implement Playbooks and weather avoidance routes. Flight Operator (Dispatcher) will be made aware of the reroute.	S-CDM	TFDM SWIM engine
Web Services		A platform-independent, loosely-coupled software component designed to support inter-operable machine-to-machine interaction over a network. It has an interface described in a machine-processable format. Other systems interact with the Web service in a manner prescribed by its description by means of XML-based messages conveyed using Internet transport protocols in conjunction with other Web-related standards.		
Web Services Requirements Document	WSRD	WSRD provides the requirements for the Terminal Flight Data Manager (TFDM) system's Airport and Flight Information Service(AFIS).		
Wheels-Off Time		The time when all parts of the aircraft are off the ground.	ATD-2 Lexicon	
William J. Hughes Technical Center	WJHTC	The FAA's William J. Hughes Technical Center is an aviation research and development, and test and evaluation facility. The Technical Center serves as the national scientific test base for the Federal Aviation Administration.		

Data Element/Term	Acronym	Description	Source	System Mapping
Winter Operations/De-icing Plan End Time		Time that aircraft de-icing is no longer in effect.	S-CDM	
Winter Operations/De-icing Plan Start Time		Start time that aircraft de-icing is in effect and hold over times are being applied.	S-CDM	
X				**Top**
Y				**Top**
Z				**Top**

3 NASA-SCDM Interface Definitions

3.1 Data from NASA to SCDM

3.1.1 Flight Data from NASA to SCDM

The source locations for each data element are neither comprehensive nor exclusive. Much of the data in this table can be found in a number of different locations. The information in the source column simply provides one or more possible sources for the data.

Flight Data	Description	Source
FID/GUFI	Unique Flight ID used for flight matching	
Call Sign	The aircraft ID (ACID) of the flight	
Tail Number	The registration mark of the flight	
Aircraft Type	The type of aircraft used for the flight	
Weight Class	The aircraft weight class	
Origin	The flight's departure airport	
Destination	The flight's arrival airport	
Departure Gate	The gate/parking stand that the flight is planning to push back from or did pushback from.	TFMData R13 Terminal Flight Data Service • depStandAssignment in TFM v3.1 FIXM extensions • standPositionAndTime in departure type in FIXM Core v3.0.1

Flight Data	Description	Source
Arrival Gate	The gate/parking stand that the flight is planning to arrive at or did arrive at.	TFMData R13 Terminal Flight Data Service • depStandAssignment in TFM v3.1 FIXM extensions • standPositionAndTime in arrival type in FIXM Core v3.0.1
Departure Runway	The flight's departure runway. Should also include an indication if this is the predicted runway or if it is the actual runway.	• Predicted by STBO • Actual • As detected by STBO from track data • From STDDS SMES
Arrival Runway	The flight's arrival runway. Should also include an indication if this is the predicted runway or if it is the actual runway.	• Predicted by STBO • Actual • As detected by STBO from track data • From STDDS SMES
Departure Fix	The departure fix used by the flight	TFMData R10/R13 • departureFixAndTime element contained in many different types of flight data messages
Arrival Fix	The arrival fix used by the flight	TFMData R10/R13 • arrivalFixAndTime element contained in many different types of flight data messages
Route	The filed flight route	
Cancellation	An indication of whether or not the flight is cancelled. May include an indication of how the flight was cancelled (e.g. CDM message, flight plan cancel,	TFMData R10: • CANCELED status in the status element of the ncsmFlightStatusAndSpecDataType, which is contained in a number of different flight data messages TFMData R13: In response to a reconstitution or arptMonitor request, see • flowFlightData->genFlightData->flightStatus • flowFlightData->genFlightData-> tmiFlightInfoList->flowProgramFlightData-> slotData->cancelStatus
Data start time	The time when the flight first became known to the NAS either from the OAG, a CDM flight create message, filing a flight plan, or track data.	TFMData R10/R13: • flightCreation time in airlineData which is an element in a few of the flight data messages
IGTD / IOBT	The first off block time received by the NAS for the flight. Used for Ration By Schedule (RBS).	TFMData R10/R13: • IGTD is a part of the qualifiedAircraftIdType, which is included in every FlightData message
SGTD / SOBT	The flight's scheduled pushback time, if available. Used as surrogate for EOBT if no other data available. (Not required)	TFMData R13 • SGTD contained in response to flight reconstitution request and response to arptMonitor request • actual runwayTime in FIXM v3.0.1 departure type published over Terminal Flight Data Service

Flight Data	Description	Source
PGTD (P-Time)	The flight's pushback time from the filed flight plan. Used as a surrogate for EOBT if EOBT and LGTD have not been provided. (Not required)	TFMData R13: • PGTD contained in response to flight reconstitution request and response to arptMonitor request
LGTD	The flight's pushback time as given by the airline as part of a CDM message. Used as a surrogate for EOBT if EOBT has not been provided. (Not required)	TFMData R13: • LGTD contained in response to flight reconstitution request and response to arptMonitor request
EOBT	The earliest time the flight can push back in the absence of external constraints (e.g. TMAT)	TFMData R13: • EOBT data element contained in response to flight reconstitution request and response to arptMonitor request • earliestOffBlockTime element in FIXM v3.0.1 departure type published over Terminal Flight Data Service
AOBT/OUT	The actual pushback time for the flight as provided by either the airline or by processing surface track data.	TFMData R10: • gateDeparture time in airlineData which is an element in a few of the flight data messages TFMData R13: • OUT contained in response to flight reconstitution request and response to arptMonitor request • actual standTime in FIXM v3.0.1 departure type published over Terminal Flight Data Service
Predicted RTT	The predicted ramp transit time (gate to spot)	STBO prediction

AMAT	The time when the flight actually enters the AMA	• STBO processing of track data
		• STDDS SMES SE messages
		• spotOut time in surface event message
		  ○ TFMData R13
		  ○ SSOT data element contained in response to flight reconstitution request and response to arptMonitor request

Predicted Taxi Time	The predicted taxi time from the spot to the queue	STBO prediction
AQET	The time when the flight actually entered the queue	STBO processing of track data
EDCT/CTD	The controlled time of departure for the flight as a part of GDP, AFP, or CTOP	TFMData R10/R13: • ctd in ncsmControlInformation in a fltdMessage
Release Time	The release time assigned to a flight as a part of an APREQ, CFR, DSP, or TBM restriction	• TBFM • TFMData R10/R13 • ETD with a type of METERED in airlineData • MSTD contained in response to flight reconstitution request and response to arptMonitor request ○ Manual entry by ATC

Flight Data	Description	Source

ATOT/OFF	The actual take off time (either from airline OOOI data, STDDS SME events, or processing of track data)	• STBO processing of track data
		• STDDS SMES SE messages
		• off time in surface event message
		  ○ TFMData R10/13
		  ○ runwayDeparture in airlineData which is an element in a few of the flight data messages
		  ○ ETD with a type of ACTUAL
		  ▪ TFMData R13
		  ▪ SOFT data element contained in response to flight reconstitution request and response to arptMonitor request
		  ▪ actual runwayTime in FIXM v3.0.1 departure type published over Terminal Flight Data Service

ETA/TLDT	The predicted landing time of the flight	• TBFM:
		• eta_rwy field
		  ○ TFMData R10/R13:
		  ○ ETA with a type of ESTIMATED, PROPOSED or SCHEDULED (or AIRLINE or CONTROLLED in R13)
		  ▪ STBO prediction

ALDT/ON	The actual landing time (either from airline OOOI data, STDDS SME events, or processing of track data)	• STBO processing of track data
		• STDDS SMES SE messages
		• off time in surface event message
		  ○ TFMData R10/13
		  ○ runwayDeparture in airlineData which is an element in a few of the flight data messages
		  ○ ETA with a type of ACTUAL
		  ▪ TFMData R13
		  ▪ SONT data element contained in response to flight reconstitution request and response to arptMonitor request
		  ▪ actual runwayTime in FIXM v3.0.1 arrival type published over Terminal Flight Data Service

AIBT/IN	The actual in-block time (either from airline OOOI data or processing of track data)	• TFMData R10/R13:
		• airlineInTime contained in the
		  ○ TFMData R13:
		  ○ OUT contained in response to flight reconstitution request and response to arptMonitor request
		  ○ actual standTime in FIXM v3.0.1 arrival type published over Terminal Flight Data Service

Flight Intent	Information about how the flight operator intends to operate the flight	TFMData R13 Terminal Flight Data Service: • Intent fields in TfmTfdmFlightType
Gate Return Info	Information indicating that the flight is returning to the gate/has returned to the gate. This information could be sent as a separate message.	• RTC manual entry • STBO detection based on track data • Intent to return to gate in TFMData R13 Terminal Flight Data Service

Flight Data	Description	Source
TMI Information	Information indicating which TMIs this flight is a part of. This information could be sent as a separate message.	

3.1.2 Flight Track Data from NASA to SCDM

Track data would only be used to display the location of flights on the SCDM Surface Display. Track data could be bundled with the other flight data or sent as a separate message.

Track Data	Description
FID / GUFI	A unique flight ID used for flight matching
Latitude	The current flight latitude
Longitude	The current flight longitude
Heading	The current flight heading
Speed	The current flight speed

3.1.3 TMI Data from NASA to SCDM

If standard XML schemas for TMI data already exist, we should be able to use those.

TMI Data	Contains
GDP, AFP, CTOP, GS Information	• A unique ID for each TMI • A list of affected flights • Control element • TMI status • TMI start and end times
MIT /MINIT information	• A unique ID for each TMI • A list of affected flights • In-trail separation requirements • Affected NAS Element • TMI status • TMI start and end times
APREQ / CFR / TBM information	• A unique ID for each TMI • A list of affected flights • Affected NAS Element • TMI status • TMI start and end times

3.1.4 Capacity Data from NASA to SCDM

Format of this data is TBD. If future capacity values are updated, these messages should include information about the duration that the capacity applies to.

Capacity Data	Description
RDR	Information about current and future runway departure rates (RDRs)
ADR	Information about current and future airport departure rates (ADRs)

Capacity Data	Description
RAR	Information about current and future runway arrival rates (RARs)
AAR	Information about current and future airport arrival rates (AARs)

3.2 Data from SCDM to NASA

3.2.1 Flight Data from SCDM to NASA

Flight Data	Description
FID/GUFI	Unique ID for the flight
TOBT	DRM recommended pushback time to meet a TMAT
TMAT	Metering time at the spot
Proposed TOBT	The TOBT associated with a proposed DMP or DMP adjustment
Proposed TMAT	The TMAT associated with a proposed DMP or DMP adjustment
PTOT	DRM predicted take off time

3.2.2 Notification Data

Data	Description
Event ID	The unique ID of this notification
Event Type	The type of the notification
Report Time	The time when the notification was published
Resource	The resource (e.g. runway, airport) that this notification applies to. May be null if notification is does not relate to a specific resource
Start Time	The start time of the event, if the notification relates to an event with a specific start time (e.g. DMP)
End Time	The end time of the event, if the notification relates to an event with a specific end time (e.g. DMP)
Additional Notification Data	Additional data related to the notification. For example, DMP data for notifications relate to DMPs or a list of flights for flight specific notifications. This additional data will probably require a different complex type for each notification type.

3.2.3 DMP Data

DMP data could be contained in notifications about DMPs. It could also be sent separately from notifications.

Data	Description
DMP ID	The unique ID of this DMP or DMP adjustment
DMP Type	The type of DMP or DMP adjustment (Initiation, Reassignment, Compression, Extension, Termination, or Cumulative Adjustment)

Data	Description
DMP Status	The status of the DMP or DMP adjustment (Proposed, Affirmed, Rejected, Active, Completed, etc.)
Resource	The resource (e.g. runway, airport) that this DMP is for
Start Time	The start time of the DMP
End Time	The end time of the DMP

4 References

S-CDM:

1. FAA Air Traffic Organization Surface Operations Directorate, “U.S. Airport Surface Concept of Operations (ConOps) in the Near-Term: Application of the Surface Concept at United States Airports,” July 2013.
2. “NASA-SCDM Interface Document” (Draft) V2 (n.d.).
3. Draft of program and operational requirements from TFDM in excel form: iORD iPRD and SSD Traces v9 (002).xlsx.

TFDM:

4. FAA, “Terminal Flight Data Manager (TFDM) System Specification Document (SSD), Attachment J-6,” 6 Mar 2015.

FAA:

5. FAA, “Pilot/Controller Glossary,” 10 Nov 2016.