

DALLAS/FORT WORTH INTERNATIONAL
AIRPORT BOARD

PROJECT
AGREEMENT

1. Contract No.
7005264

2. Requisition No.
232098

3. Project Agreement No.
5264-001-R00

4. Name & Address of Consultant/Contractor

North Texas Tollway Authority
5900 West Plano Parkway, Suite 100
Plano, TX 75093
P.O. Box 260729
Plano, TX 75026

5. Project Agreement Amount
NTE \$720,000.00

6. Administrative and Accounting Data

Current Project Agreement Value: \$720,000.00

7. Bond Fund Information

Yes _____ N/A X

FUND NO. N/A

8. Project Agreement Order Title

Project Agreement No. 1 – Lane Equipment Maintenance and
Support

9. References

Attached Project Agreement No. 1

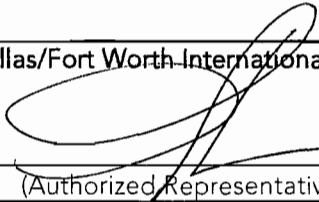
10. Services to be Provided

Provide all services as specified in attached Project Agreement No. 1 documents.

11. Performance Period

Start: July 1, 2010
Expire: Pendency (upon 180 days notification to
terminate by either party – See Master Agreement
Article 2.26)

12. Dallas/Fort Worth International Airport Board

By 
(Authorized Representative)

Name of Authorized Representative
(Type or Print)
Gregory C. Spoon, CPSM, CMRP, Vice President
or
Joanne Baca Garcia, Assistant Vice President
Procurement & Materials Management

Date
Signed

9/27/10

Requisition: 232098
Requisition Type: Purchase Requisition
Creation Date: 22-SEP-10
Description: NNTA Contract 7005264 PA1
Note To Approver: Systems approved
Notes:

Preparer: JOHNSON, Mr. WILLIAM
Approver: FLOWERS, Mr. WILLIAM
Currency: USD

Line	Line Type	Item	Rev	Category	Description	Unit	Quantity/Amount	Unit Price	Line Amount
		Requester	Need By Date	Source Urgent Type	Source				
1	Goods	--		812930	Allocate funding for	Each	3.00	18500	55,500.00
		JOHNSON, Mr. WILLIAM	24-SEP-10	Supplier	the new contract with				
					NNTA - Interlocal				
					Agreement 7005264,				
					Project Agreement No.				
					1 - AVI Lane				
					Maintenance, for the				
					months of July 2010 -				
					September 2010.				
					Budget I.D. No. 174.				
					232098 - NORTH TEXAS TOLLWAY AUTHORITY - 75093 - - 5591				

Distributions: 3

Allocated To Account: 0102-2660-0-5250-019-440-00000-00-00-0

Justification:
Note To Approver: Systems approved
Notes:

Total: 55,500.00

Previous Approvals:

Sequence	Date	Approver	Action	Note
0	22-SEP-10	JOHNSON, Mr. WILLIAM	Reserve	
1	22-SEP-10	JOHNSON, Mr. WILLIAM	Submit	
2	22-SEP-10	JOHNSON, Mr. WILLIAM	Forward	
3	24-SEP-10	SCHROEDER, Mr. CURTI	Approve	
4	26-SEP-10	FLOWERS, Mr. WILLIAM	Approve	Systems approved

Approval Action (Circle One):

Approve Forward Reject

Forward To: _____

Note: _____

Signature: _____

**North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support**

1.0 DESCRIPTION

This Project Agreement identifies Maintenance and Support requirements for all hardware and software that comprises the Automated Vehicle Identification (AVI) Lane Equipment at the Dallas/Ft. Worth Airport (DFW).

2.0 OBJECTIVES

The goal of this Project Agreement is to maintain normal operations of all AVI Lane Equipment and to define the services to be performed, performance period, response time, NTTA responsibilities, and DFW Airport Board responsibilities.

3.0 DEFINITIONS

3.1 Information Technology Services (ITS) – For the purposes of this agreement, ITS is defined as the DFW International Airport's ITS Department.

3.2 Parking Business Unit (PBU) – For the purposes of this agreement, PBU is defined as the DFW International Airport's Parking Business Unit.

3.3 Preventative Maintenance (PM) - Maintenance performed on a regular or scheduled basis for the purpose of maintaining equipment and facilities in satisfactory operating condition and/or extending the life of the equipment. PM includes, but is not limited to testing, adjusting, cleaning, and/or replacing equipment as required. The PM Plan shall be referenced as Exhibit B in this agreement.

3.4 AVI Lane Equipment – The equipment required for an AVI Lane to function as designed. For the purposes of this agreement, the AVI Lane Equipment shall be defined as the hardware and software installed and operational in existing AVI lanes at the time this agreement is signed. It is the equipment NTTA shall be responsible for maintaining on the DFW Airport AVI System.

3.5 Hardware Inventory – Inventory necessary for the operation of AVI Lane Equipment. The hardware inventory will vary upon the setup of each lane, gantry or portal. Hardware Inventory shall be referenced as Exhibit A in this agreement.

3.6 Spare Parts Inventory – Parts maintained in inventory and available for immediate use in the repair of a defective or malfunctioning component.

3.7 Reactive Maintenance (RM) - Maintenance performed on an as needed basis when a condition occurs that caused or may cause a failure of AVI lane equipment. Also known as break/fix. RM includes, but is not limited to repairing, testing, adjusting, cleaning, and/or replacing equipment as required. Reactive Maintenance expectations shall be set forth in the Service Level Agreement (SLA).

3.8 Service Level Agreement (SLA) – Agreement between partners that establishes a common understanding of services, priorities, responsibilities, guarantees, and warranties. An SLA may also define "targets" and/or "minimums," and address availability, serviceability, performance, and operational requirements.

3.9 Service Delivery Plan – The Service Delivery Plan is how NTTA will meet the expectations of the SLA. It may include but is not limited to staffing, on-call procedures, escalation and communications processes. The Service Delivery Plan shall be referenced as Exhibit C in this agreement

North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support

- 3.10 Peak Operational Hours – The peak hours of operation in a 24 hour day. The DFW Airport Parking Revenue Control System peak operational hours are (6:00 A.M. to 12:00 A.M.), seven days a week.
- 3.11 Peak Holiday Travel Time – Specific days preceding, including and following the holidays of New Years Day, Memorial Day, Labor Day, Fourth of July, Thanksgiving, and Christmas when vehicular traffic at DFW Airport is at an all time high. The specific peak days are dependent on the day of the week on which the Holiday falls.

<u>Holiday</u>	<u>Days of Peak</u>	<u>Time of Peak</u>
<u>Falls on</u>	<u>Travel</u>	<u>Travel</u>
Mon	Thu & Fri (prior)	6:00 a.m. to midnight
	Mon (holiday)	6:00 a.m. to midnight
Tue	Fri (prior)	6:00 a.m. to midnight
	Tue (holiday)	6:00 a.m. to midnight
Wed	Tue (prior)	6:00 a.m. to midnight
	Mon (following)	6:00 a.m. to midnight
Thu	Wed (prior)	6:00 a.m. to midnight
	Sun (following)	6:00 a.m. to midnight
Fri	Thu (prior)	6:00 a.m. to midnight
	Mon (following)	6:00 a.m. to midnight
Sat	Thu (prior)	6:00 a.m. to midnight
	Fri (prior)	6:00 a.m. to midnight
Sun	Fri (prior)	6:00 a.m. to midnight
	Sun (holiday)	6:00 a.m. to midnight
	Mon (following)	6:00 a.m. to midnight

4.0 SUBMITTALS

Included in the Cost for this Inter-local Agreement, NTTA will submit the following for review and approval by the Airport Board's Technical Representative and include as Exhibits A through C:

- 4.1 Hardware Inventory
- 4.2 Preventative Maintenance Plan
- 4.3 Service Level Delivery Plan

5.0 MAINTENANCE AND SUPPORT REQUIREMENTS

- 5.1 NTTA will provide support for all AVI Lane Equipment as defined in this Project Agreement and Exhibits in order to maintain system operations.
- 5.2 NTTA will furnish all supervision, labor, tools, machinery, hardware, test equipment, materials, services, and third party support as necessary to support the AVI Lane Equipment to comply with this project agreement.
- 5.3 NTTA shall coordinate all maintenance and support activities with the appropriate DFW authority in advance.

**North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support**

5.4 NTTA will be the primary contact for all service calls associated with the AVI Lane Equipment. NTTA will work with the Airport Board's Designated Technical Representative until the AVI Lane Equipment service call is resolved.

5.5 Service calls that are found to be a DFW facility/network problem shall be transferred to the Airport Board's Designated Technical Representative.

6.0 PREVENTATIVE MAINTENANCE PLAN (PM) –

6.1 The PM Plan shall be referenced as Exhibit B in this agreement.

6.2 The PM Plan may be modified at any time through mutual agreement between the operational parties.

6.3 Preventative Maintenance activities shall be carried out in such a way as to avoid impacting service levels, revenue collection or operations.

6.4 Preventative Maintenance shall not be scheduled during Peak Holiday Travel Times.

6.5 NTTA shall coordinate PM with the Airport Board's Designated Technical Representative in advance.

6.6 Preventative Maintenance Activities shall be logged as part of the regular course of operation and records maintained by NTTA.

6.7 Preventative Maintenance records, procedures, tools and reports are subject to inspection by authorized Airport Board's Designated Representatives and NTTA representatives at any time.

7.0 HARDWARE INVENTORY AND SPARE PARTS INVENTORY

7.1 The Hardware Inventory shall be referenced as Exhibit A in this agreement.

7.2 The Hardware Inventory may be modified at any time through mutual written agreement between the operational parties.

7.3 The NTTA will provide spare parts inventory as needed from existing NTTA inventory stock.

7.4 THE NTTA will maintain spare parts inventory specific to the AVI Lane Equipment installed at DFW in such a manner as to ensure that parts are readily available for one to one replacement as necessary for reactive maintenance.

7.5 Airport Board will provide facility for storage of spare parts for ready access by NTTA, if needed.

7.6 NTTA will be responsible for all costs associated with maintaining the spare parts inventory specific to the AVI Lane Equipment.

7.7 NTTA will be responsible for all costs associated with returning defective devices and receiving replacement devices from the Original Equipment Manufacturer (OEM) specific to the AVI Lane Equipment.

7.8 NTTA will be responsible for spare parts maintenance, material handling, inventory controls, shipping for repairs specific to the AVI Lane Equipment.

7.9 NTTA shall recognize that any individual item installed and/operational for the AVI Lane Equipment with a value over \$5,000 must be tagged and maintained under DFW Asset Management procedures.

**North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support**

- 7.10 Title to all parts or equipment installed under this Project Agreement will pass to the Airport Board at the time of installation.
- 7.11 The Hardware Inventory records, procedures, tools and reports are subject to inspection by authorized Airport Board and NTTA representatives at any time.
- 7.12 The Hardware Inventory will be reviewed semi-annually by the Airport Board's Designated Representatives, and NTTA, and may be modified if required and mutually agreed in writing.

8.0 SERVICE LEVEL AGREEMENT AND DELIVERY PLAN

- 8.1 The measurement of availability shall only be based on events within NTTA's control and with due consideration for the definitions contained in the Service Delivery Plan (Exhibit C). If the measured item is not available due to reasons outside of NTTA's control, such as but not limited to, problems with the wide area network and local area network, such events will be excluded from the measurement of availability.
- 8.2 AVI Lane Equipment availability shall meet the following criteria:
 - 8.2.1 AVI Lane Equipment Outage of less than 33% of active lanes at any given portal (including cross-over lanes) is considered standard reactive maintenance.
 - 8.2.2 AVI Lane Equipment Outage of more than 33% of active lanes at any given portal (excluding cross-over lanes) is considered an emergency situation.
- 8.3 Service Call Response Times shall meet the following criteria:
 - 8.3.1 Telephone response to the first notification from DFW shall be within 30 minutes during Peak Operational Hours.
 - 8.3.2 DFW staff shall make every effort to notify NTTA within 30 minutes of determining a call is AVI Lane Equipment related during Peak Operational Hours.
 - 8.3.3 Remote access (if required) to begin service call resolution shall be within 60 minutes of first notification during Peak Operational Hours.
 - 8.3.4 Arrival on site (if required) to begin service call resolution shall be within 90 minutes of the first notification during Peak Operational Hours.
- 8.4 Service Call Resolution Times shall meet the following criteria:
 - 8.4.1 AVI Lane Equipment Outage of more than 33% of active lanes at any given portal (excluding cross-over lanes) is considered an emergency situation. Every effort should be made to restore AVI lane equipment to full operational status in less than four (4) hours from initial notification.
 - 8.4.2 AVI Lane Equipment Outage of less than 33% of active lanes at any given portal (including cross-over lanes) is considered standard reactive maintenance. Every effort should be made to restore AVI lane equipment to full operational status within eight (8) hours. .
- 8.5 Hours of Service for service call resolution shall meet the following criteria:
 - 8.5.1 Provide on-call support (telephone, remote access and on-site as required) during Peak Operational Hours.

**North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support**

- 8.6 The Service Level Delivery Plan may be modified at any time through mutual agreement between the operational parties.
- 8.7 The Service Level Delivery Plan shall include a communications and escalation plan to be maintained as part of the overall plan.
- 8.8 Service Level Delivery Plan records, procedures, tools and reports are subject to inspection by authorized Airport Board Representative and NTTA representatives at any time.
- 8.9 The Service Level Delivery Plan will be reviewed semi-annually by the Airport Board's Designated Technical Representative, and NTTA, and may be modified if required and mutually agreed upon.
- 8.10 Based upon the review and an analysis of the metrics, NTTA shall address and remedy any systematic problems or negative performance trends.
- 8.11 If Service Levels fall below minimums or service call resolution time exceeds fifteen percent (15%) of the total for reported service calls for one quarter, then the NTTA shall submit a plan for review and approval by the Airport to restore Service Levels at no cost to the Airport.

9.0 CHANGE MANAGEMENT

- 9.1 When possible, all planned changes are to be scheduled during the Airport's Non-Peak Holiday Travel Time.
- 9.2 Unplanned changes may be implemented only if the Airport Board's Authorized Technical Representative and the designated PBU representative agree the work is essential to operations and cannot be deferred,
- 9.3 Installation of AVI Equipment, which may affect performance, shall be implemented only during Non-Peak Holiday Travel Times.
- 9.4 NTTA will install, test and verify AVI Lane Equipment as necessary.
- 9.5 NTTA is responsible for identifying, managing and resolving all "Post Installation" business and technical support issues.

10.0 SEMI-ANNUAL REVIEW

- 10.1 DFW and NTTA representatives will meet formally on a semi-annual basis to review and if necessary, revise the exhibits presented in this agreement and present relevant operational and metric reporting.

11.0 RATES, CHARGES AND ANNUAL ADJUSTMENTS

- 11.1 The Parties agree compensation for the services to be provided as set forth in this Project Agreement and its Exhibits is set forth in Exhibit D.
- 11.2 Exhibit D may be amended by written agreement of the Parties.

12.0 EXHIBITS

- EXHIBIT A – Hardware Inventory
- EXHIBIT B – Preventative Maintenance Plan
- EXHIBIT C – Service Level Delivery Plan

**North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support**

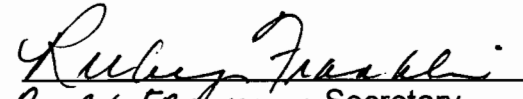
13.0 EFFECTIVE DATE

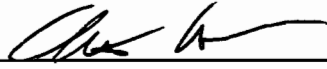
This Project Agreement No. 1 is effective July 1, 2010.

IN WITNESS WHEREOF, the Airport Board and the NTTA have executed this Interlocal Agreement on the dates shown below, to be effective on the date listed above.

ATTEST:


NORTH TEXAS TOLLWAY AUTHORITY


RUBY FRANKLIN, Secretary

By: 

APPROVED AS TO FORM:

Date: 9/21/10

By: 

**North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support
Exhibit A – Hardware Inventory**

1.0 DESCRIPTION

This Hardware Inventory shall identify the AVI Lane Equipment inventory in place at DFW International Airport at the time of the agreement to the Master Project Agreement. This AVI Lane Equipment inventory is the inventory necessary for the operation of AVI Lane Equipment. The hardware inventory will vary upon the setup of each lane, gantry or portal.

2.0 OBJECTIVES

The goal of this Hardware Inventory is to maintain record of the AVI Lane Equipment necessary to maintain operations for the AVI Lane Equipment installed and operational at DFW International Airport.

3.0 ATTACHMENTS

- 3.1 DFW Parking Device Map
- 3.2 DFW Lane Hardware

Per Transcore's AR2200 product sheet, the authorized frequency band in the U.S. is 902 to 904 and 909.75 to 921.75 MHz.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Location	Appendix E2 Lane no. (Ticket)	Appendix E2 Lane no. (SRD)	AVI Lane No.	Federal Lane no.	ETC Lane Name	Lane Type	Notes	CISCO SWITCH	IP Address	IP Address	Comm Connection	Subnet	Gateway	Serial Failover Port Assignment																Opto Board Assignment										Rack-mount RLC	Patron Lanes	Remote Lanes	Promus/ Opto	Opto 8	AVI Panel 20x24 RLC Panel 30x36	Dual RLC Panel 48x36	CANTILEVER POLES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Remote South (NSL)	Redundant Lane Controller								10.12.6.45	10.12.6.46	1 MMFO		AVI	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14	J15	J16	J17	J18	J19	J20	J21	J22	J23	J24	J25	J26	J27	J28	J29	J30	J31	J32	J33	J34	J35	J36	J37	J38	J39	J40	J41	J42	J43	J44	J45	J46	J47	J48	J49	J50	J51	J52	J53	J54	J55	J56	J57	J58	J59	J60	J61	J62	J63	J64	J65	J66	J67	J68	J69	J70	J71	J72	J73	J74	J75	J76	J77	J78	J79	J80	J81	J82	J83	J84	J85	J86	J87	J88	J89	J90	J91	J92	J93	J94	J95	J96	J97	J98	J99	J100	J101	J102	J103	J104	J105	J106	J107	J108	J109	J110	J111	J112	J113	J114	J115	J116	J117	J118	J119	J120	J121	J122	J123	J124	J125	J126	J127	J128	J129	J130	J131	J132	J133	J134	J135	J136	J137	J138	J139	J140	J141	J142	J143	J144	J145	J146	J147	J148	J149	J150	J151	J152	J153	J154	J155	J156	J157	J158	J159	J160	J161	J162	J163	J164	J165	J166	J167	J168	J169	J170	J171	J172	J173	J174	J175	J176	J177	J178	J179	J180	J181	J182	J183	J184	J185	J186	J187	J188	J189	J190	J191	J192	J193	J194	J195	J196	J197	J198	J199	J200	J201	J202	J203	J204	J205	J206	J207	J208	J209	J210	J211	J212	J213	J214	J215	J216	J217	J218	J219	J220	J221	J222	J223	J224	J225	J226	J227	J228	J229	J230	J231	J232	J233	J234	J235	J236	J237	J238	J239	J240	J241	J242	J243	J244	J245	J246	J247	J248	J249	J250	J251	J252	J253	J254	J255	J256	J257	J258	J259	J260	J261	J262	J263	J264	J265	J266	J267	J268	J269	J270	J271	J272	J273	J274	J275	J276	J277	J278	J279	J280	J281	J282	J283	J284	J285	J286	J287	J288	J289	J290	J291	J292	J293	J294	J295	J296	J297	J298	J299	J300	J301	J302	J303	J304	J305	J306	J307	J308	J309	J310	J311	J312	J313	J314	J315	J316	J317	J318	J319	J320	J321	J322	J323	J324	J325	J326	J327	J328	J329	J330	J331	J332	J333	J334	J335	J336	J337	J338	J339	J340	J341	J342	J343	J344	J345	J346	J347	J348	J349	J350	J351	J352	J353	J354	J355	J356	J357	J358	J359	J360	J361	J362	J363	J364	J365	J366	J367	J368	J369	J370	J371	J372	J373	J374	J375	J376	J377	J378	J379	J380	J381	J382	J383	J384	J385	J386	J387	J388	J389	J390	J391	J392	J393	J394	J395	J396	J397	J398	J399	J400	J401	J402	J403	J404	J405	J406	J407	J408	J409	J410	J411	J412	J413	J414	J415	J416	J417	J418	J419	J420	J421	J422	J423	J424	J425	J426	J427	J428	J429	J430	J431	J432	J433	J434	J435	J436	J437	J438	J439	J440	J441	J442	J443	J444	J445	J446	J447	J448	J449	J450	J451	J452	J453	J454	J455	J456	J457	J458	J459	J460	J461	J462	J463	J464	J465	J466	J467	J468	J469	J470	J471	J472	J473	J474	J475	J476	J477	J478	J479	J480	J481	J482	J483	J484	J485	J486	J487	J488	J489	J490	J491	J492	J493	J494	J495	J496	J497	J498	J499	J500	J501	J502	J503	J504	J505	J506	J507	J508	J509	J510	J511	J512	J513	J514	J515	J516	J517	J518	J519	J520	J521	J522	J523	J524	J525	J526	J527	J528	J529	J530	J531	J532	J533	J534	J535	J536	J537	J538	J539	J540	J541	J542	J543	J544	J545	J546	J547	J548	J549	J550	J551	J552	J553	J554	J555	J556	J557	J558	J559	J560	J561	J562	J563	J564	J565	J566	J567	J568	J569	J570	J571	J572	J573	J574	J575	J576	J577	J578	J579	J580	J581	J582	J583	J584	J585	J586	J587	J588	J589	J590	J591	J592	J593	J594	J595	J596	J597	J598	J599	J600	J601	J602	J603	J604	J605	J606	J607	J608	J609	J610	J611	J612	J613	J614	J615	J616	J617	J618	J619	J620	J621	J622	J623	J624	J625	J626	J627	J628	J629	J630	J631	J632	J633	J634	J635	J636	J637	J638	J639	J640	J641	J642	J643	J644	J645	J646	J647	J648	J649	J650	J651	J652	J653	J654	J655	J656	J657	J658	J659	J660	J661	J662	J663	J664	J665	J666	J667	J668	J669	J670	J671	J672	J673	J674	J675	J676	J677	J678	J679	J680	J681	J682	J683	J684	J685	J686	J687	J688	J689	J690	J691	J692	J693	J694	J695	J696	J697	J698	J699	J700	J701	J702	J703	J704	J705	J706	J707	J708	J709	J710	J711	J712	J713	J714	J715	J716	J717	J718	J719	J720	J721	J722	J723	J724	J725	J726	J727	J728	J729	J730	J731	J732	J733	J734	J735	J736	J737	J738	J739	J740	J741	J742	J743	J744	J745	J746	J747	J748	J749	J750	J751	J752	J753	J754	J755	J756	J757	J758	J759	J760	J761	J762	J763	J764	J765	J766	J767	J768	J769	J770	J771	J772	J773	J774	J775	J776	J777	J778	J779	J780	J781	J782	J783	J784	J785	J786	J787	J788	J789	J790	J791	J792	J793	J794	J795	J796	J797	J798	J799	J800	J801	J802	J803	J804	J805	J806	J807	J808	J809	J810	J811	J812	J813	J814	J815	J816	J817	J818	J819	J820	J821	J822	J823	J824	J825	J826	J827	J828	J829	J830	J831	J832	J833	J834	J835	J836	J837	J838	J839	J840	J841	J842	J843	J844	J845	J846	J847	J848	J849	J850	J851	J852	J853	J854	J855	J856	J857	J858	J859	J860	J861	J862	J863	J864	J865	J866	J867	J868	J869	J870	J871	J872	J873	J874	J875	J876	J877	J878	J879	J880	J881	J882	J883	J884	J885	J886	J887	J888	J889	J890	J891	J892	J893	J894	J895	J896	J897	J898	J899	J900	J901	J902	J903	J904	J905	J906	J907	J908	J909	J910	J911	J912	J913	J914	J915	J916	J917	J918	J919	J920	J921	J922	J923	J924	J925	J926	J927	J928	J929	J930	J931	J932	J933	J934	J935	J936	J937	J938	J939	J940	J941	J942	J943	J944	J945	J946	J947	J948	J949	J950	J951	J952	J953	J954	J955	J956	J957	J958	J959	J960	J961	J962	J963	J964	J965	J966	J967	J968	J969	J970	J971	J972	J973	J974	J975	J976	J977	J978	J979	J980	J981	J982	J983	J984	J985	J986	J987	J988	J989	J990	J991	J992	J993	J994	J995	J996	J997	J998	J999	J1000	J1001	J1002	J1003	J1004	J1005	J1006	J1007	J1008	J1009	J1010	J1011	J1012	J1013	J1014	J1015	J1016	J1017	J1018	J1019	J1020	J1021	J1022	J1023	J1024	J1025	J1026	J1027	J1028	J1029	J1030	J1031	J1032	J1033	J1034	J1035	J1036	J1037	J1038	J1039	J1040	J1041	J1042	J1043	J1044	J1045	J1046	J1047	J1048	J1049	J1050	J1051	J1052	J1053	J1054	J1055	J1056	J1057	J1058	J1059	J1060	J1061	J1062	J1063	J1064	J1065	J1066	J1067	J1068	J1069	J1070	J1071	J1072	J1073	J1074	J1075	J1076	J1077	J1078	J1079	J1080	J1081	J1082	J1083	J1084	J1085	J1086	J1087	J1088	J1089	J1090	J1091	J1092	J1093	J1094	J1095	J1096	J1097	J1098	J1099	J1100	J1101	J1102	J1103	J1104	J1105	J1106	J1107	J1108	J1109	J1110	J1111	J1112	J1113	J1114	J1115	J1116	J1117	J1118	J1119	J1120	J1121	J1122	J1123	J1124	J1125	J1126	J1127	J1128	J1129	J1130	J1131	J1132	J1133	J1134	J1135	J1136	J1137	J1138	J1139	J1140	J1141	J1142	J1143	J1144	J1145	J1146	J1147	J1148	J1149	J1150	J1151	J1152	J1153	J1154	J1155	J1156	J1157	J1158	J1159	J1160	J1161	J1162	J1163	J1164	J1165	J1166	J1167	J1168	J1169	J1170	J1171	J1172	J1173	J1174	J1175	J1176	J1177	J1178	J1179	J1180	J1181	J1182	J1183	J1184	J1185	J1186	J1187	J1188	J1189	J1190	J1191	J1192	J1193	J1194	J1195	J1196	J1197	J1198	J1199	J1200	J1201	J1202	J1203	J1204	J1205	J1206	J1207	J1208	J1209	J1210	J1211	J1212	J1213	J1214	J1215	J1216	J1217	J1218	J1219	J1220	J1221	J1222	J1223	J1224	J1225	J1226	J1227	J1228	J1229	J1230	J1231	J1232	J1233	J1234	J1235	J1236	J1237	J1238	J1239	J1240	J1241	J1242	J1243	J1244	J1245	J1246	J1247	J1248	J1249	J1250	J1251	J1252	J1253	J1254	J1255	J1256	J1257	J1258	J1259	J1260	J1261	J1262	J1263	J1264	J1265	J1266	J1267	J1268	J1269	J1270	J1271	J1272	J1273	J1274	J1275	J1276	J1277	J1278	J1279	J1280	J1281	J1282	J1283	J1284	J1285	J1286	J1287	J1288	J1289	J1290	J1291	J1292	J1293	J1294	J1295	J1296	J1297	J1298	J1299	J1300	J1301	J1302	J1303	J1304	J1305	J1306	J1307	J1308	J1309	J1310	J1311	J1312	J1313	J1314	J1315	J1316	J1317	J1318	J1319	J1320	J1321	J1322	J1323	J1324	J1325	J1326	J1327	J1328	J1329	J1330	J1331	J1332	J1333	J1334	J1335	J1336	J1337	J1338	J1339	J1340	J1341	J1342	J1343	J1344	J1345	J1346	J1347	J1348	J1349	J1350	J1351	J1352	J1353	J1354	J1355	J1356	J1357	J1358	J1359	J1360	J1361	J1362	J1363	J1364	J1365	J1366	J1367	J1368	J1369	J1370	J1371	J1372	J1373	J1374	J1375	J1376	J1377	J1378	J1379	J1380	J1381	J1382	J1383	J1384	J1385	J1386	J1387	J1388	J1389	J1390	J1391	J1392	J1393	J1394	J1395	J1396	J1397	J1398	J1399	J1400	J1401	J1402	J1403	J1404	J1405	J1406	J1407	J1408	J1409	J1410	J1411	J1412	J1413	J1414	J1415	J1416	J1417	J1418	J1419	J1420	J1421	J1422	J1423	J1424	J1425	J1426	J1427	J1428	J1429	J1430	J1431	J1432	J1433	J1434	J1435	J1436	J1437	J1438	J1439	J1440	J1441	J1442	J1443	J1444	J1445	J1446	J1447	J1448	J1449	J1450	J1451	J1452	J1453	J1454	J1455	J145

LOCATION	NUMBER OF LANES	ENTRY	EXIT	SRD	NUMBER OF LANE CONTROLLERS
NORTH ENTRY	11	11	0	0	6
NORTH EXIT	19	0	19	0	8
SOUTH ENTRY	12	12			6
SOUTH EXIT	18	0	18	0	8
	60	23	37	0	28

D																
Location	Appendix E2 Lane no.	AVI Lane No.	Federal Lane no.	ETC Lane Name	Gate Raise Classes	Actual Freq	RF Freq	Reader Sync	Lane Type	Config	Notes	CISCO SWITCH	IP Address	IP Address	Subnet	Gateway
PLAZA																
North Plaza Entry	ant Lane Controllers										2 cat 5e to cisco switch	CJB-NP-14-D4	10.12.2.93	10.12.2.94		
	04-97	54-97	97	DFW-NORTH-97			915	0	Unmanned	Canopy	Phase 1 dedicated Toll Tag					
	04-10	54-10	10	DFW-NORTH-10			902	1	Ticket Manned	Canopy	Phase 1 Toll Tag					
	04-11	54-11	11	DFW-NORTH-11			902	0	Ticket Manned	Canopy	Phase 1 Toll Tag					
	ant Lane Controllers										2 cat 5e to cisco switch	CJB-NP-14-D4	10.12.2.58	10.12.2.59		
	04-12	54-12	12	DFW-NORTH-12			918	1	Ticket Manned	Canopy						
	03-13	53-13	13	DFW-NORTH-13			918	0	Ticket Manned	Canopy						
	03-14	53-14	14	DFW-NORTH-14			910	1	Ticket Manned	Canopy						
	03-15	53-15	15	DFW-NORTH-15			910	0	Ticket Manned	Canopy						
	03-16	53-16	16	DFW-NORTH-16			921	1	Ticket Manned	Canopy						
	03-17	53-17	17	DFW-NORTH-17			921	0	Ticket Manned	Canopy						
	03-18	53-18	18	DFW-NORTH-18			912	1	Ticket Manned	Canopy						
	03-19	53-19	19	DFW-NORTH-19			912	0	Ticket Manned	Canopy						
PLAZA																
North Plaza Exit	Redundant Lane Controllers										2 cat 5e to cisco switch	CJB-NP-2-D4	10.12.4.32	10.12.4.33		
	03-41	53-41	41	DFW-NORTH-41			915	0	Cashier Terminal	Canopy						
	03-42	53-42	42	DFW-NORTH-42			915	1	Cashier Terminal	Canopy						
	03-43	53-43	43	DFW-NORTH-43			919	0	Cashier Terminal	Canopy						
	03-44	53-44	44	DFW-NORTH-44			919	1	Cashier Terminal	Canopy						
	03-45	53-45	45	DFW-NORTH-45			913	0	Cashier Terminal	Canopy						
	Redundant Lane Controllers										2 cat 5e to cisco switch	CJB-NP-48-D4	10.12.4.68	10.12.4.69		
	03-46	53-46	46	DFW-NORTH-46			913	1	Cashier Terminal	Canopy						
	03-47	53-47	47	DFW-NORTH-47			916	0	Cashier Terminal	Canopy						
	03-48	53-48	48	DFW-NORTH-48			916	1	Cashier Terminal	Canopy						
	03-49	53-49	49	DFW-NORTH-49			920	0	Cashier Terminal	Canopy						
	Redundant Lane Controllers										2 cat 5e to cisco switch	CJB-NP-48-D4	10.12.4.118	10.12.4.119		
	04-50	54-50	50	DFW-NORTH-50			920	1	Cashier Terminal	Canopy						
	04-51	54-51	51	DFW-NORTH-51			914	0	Cashier Terminal	Canopy						
	04-52	54-52	52	DFW-NORTH-52			914	1	Cashier Terminal	Canopy						
	04-53	54-53	53	DFW-NORTH-53			910	0	Cashier Terminal	Canopy						
	04-54	54-54	54	DFW-NORTH-54			910	1	Cashier Terminal	Canopy						
	Redundant Lane Controllers										2 cat 5e to cisco switch	CJB-NP-48-D4	10.12.4.178	10.12.4.179		
	04-55	54-55	55	DFW-NORTH-55			912	0	Cashier Terminal	Canopy						
	04-56	54-56	56	DFW-NORTH-56			912	1	Cashier Terminal	Canopy						
	04-57	54-57	57	DFW-NORTH-57			904	0	Cashier Terminal	Canopy						
	04-58	54-58	58	DFW-NORTH-58			904	1	Cashier Terminal	Canopy						
	04-59	54-59	59	DFW-NORTH-59			918	0	Unmanned	Gantry	Phase 1 dedicated Toll Tag					

Per Transcore's AR2200 product sheet, the authorized frequency band in the U.S. is 902 to 904 and 909.75 to 921.75 MHz

Location	Appendix E2 Lane no.	AVI Lane No.	Federal Lane no.	ETC Lane Name	Gate Raise Classes	Actual Freq	RF Freq	Reader Sync	Lane Type	Config	Notes	CISCO SWITCH	IP Address	IP Address	Subnet	Gateway
PLAZA																
South Plaza Entrance	ant Lane Controllers										2 cat 5e to cisco switch	NTTA SW	10.12.30.104	10.12.30.105		
	02-98	52-98	98	DFW-SOUTH-98			902	0	Unmanned	Canopy	Phase 1 dedicated Toll Tag					
	02-1	52-01	1	DFW-SOUTH-01			902	1	Ticket Manned	Canopy	Phase 1 Toll Tag					
	02-91	52-91	91	DFW-BUS-91			915	n/a	Northbound Entry	Island	Bus Lanes, smartpass					
	02-92	52-92	92	DFW-BUS-92			917	n/a	Southbound Exit	Island	Bus Lanes, smartpass					
	ant Lane Controllers										2 cat 5e to cisco switch	NTTA SW	10.12.30.20	10.12.30.21		
	02-2	52-02	2	DFW-SOUTH-02			918	0	Ticket Manned	Canopy						
	02-3	52-03	3	DFW-SOUTH-03			918	1	Ticket Manned	Canopy						
	01-04	51-04	4	DFW-SOUTH-04			910	0	Ticket Manned	Canopy						
	01-05	51-05	5	DFW-SOUTH-05			910	1	Ticket Manned	Canopy						
	01-06	51-06	6	DFW-SOUTH-06			921	0	Ticket Manned	Canopy						
	01-07	51-07	7	DFW-SOUTH-07			921	1	Ticket Manned	Canopy						
	01-08	51-08	8	DFW-SOUTH-08			912	0	Ticket Manned	Canopy						
	01-09	51-09	9	DFW-SOUTH-09			912	1	Ticket Manned	Canopy						
PLAZA																
South Plaza Exit	ant Lane Controllers										2 cat 5e to cisco switch	CJB-SP-14-D4	10.12.32.20	10.12.32.21		
	01-21	51-21	21	DFW-SOUTH-21			915	0	Cashier Terminal	Canopy	AVI cabinet 1					
	01-22	51-22	22	DFW-SOUTH-22			915	1	Cashier Terminal	Canopy	AVI cabinet 1					
	01-23	51-23	23	DFW-SOUTH-23			919	0	Cashier Terminal	Canopy	AVI cabinet 1					
	01-24	51-24	24	DFW-SOUTH-24			919	1	Cashier Terminal	Canopy	AVI cabinet 1					
	01-25	51-25	25	DFW-SOUTH-25			913	0	Cashier Terminal	Canopy	AVI cabinet 1					
	ant Lane Controllers										2 cat 5e to cisco switch	FAPD SW	10.12.32.70	10.12.32.71		
	01-26	51-26	26	DFW-SOUTH-26			913	1	Cashier Terminal	Canopy	AVI cabinet 2					
	01-27	51-27	27	DFW-SOUTH-27			916	0	Cashier Terminal	Canopy	AVI cabinet 2					
	01-28	51-28	28	DFW-SOUTH-28			916	1	Cashier Terminal	Canopy	AVI cabinet 2					
	01-29	51-29	29	DFW-SOUTH-29			920	0	Cashier Terminal	Canopy	AVI cabinet 2					
	ant Lane Controllers										2 cat 5e to cisco switch	NTTA SW	10.12.32.130	10.12.32.131		
	02-30	52-30	30	DFW-SOUTH-30			920	1	Cashier Terminal	Canopy	AVI cabinet 3					
	02-31	52-31	31	DFW-SOUTH-31			914	0	Cashier Terminal	Canopy	AVI cabinet 3					
	02-32	52-32	32	DFW-SOUTH-32			914	1	Cashier Terminal	Canopy	AVI cabinet 3					
	02-33	52-33	33	DFW-SOUTH-33			910	0	Cashier Terminal	Canopy	AVI cabinet 3					
	02-34	52-34	34	DFW-SOUTH-34			910	1	Cashier Terminal	Canopy	AVI cabinet 3					
	ant Lane Controllers										2 cat 5e to cisco switch	NTTA SW	10.12.32.190	10.12.32.191		
	02-35	52-35	35	DFW-SOUTH-35			912	0	Cashier Terminal	Canopy	Phase 1 Toll Tag					
	02-36	52-36	36	DFW-SOUTH-36			904	1	Cashier Terminal	Canopy	Phase 1 Toll Tag					
	02-37	52-37	37	DFW-SOUTH-37			904	0	Cashier Terminal	Canopy	Phase 1 Toll Tag					
	02-38	52-38	38	DFW-SOUTH-38			918	1	Unmanned	Gantry	Phase 1 dedicated Toll Tag					

LOCATION	NUMBER OF LANES	ENTRY	EXIT	SRD	NUMBER OF LANE CONTROLLERS
REMOTE NORTH	5	2	3	0	1
REMOTE SOUTH	5	2	3	0	1
BUSINESS CENTER	3	1	2	0	1
EXPRESS SOUTH	4	2	2	0	1
	4	1	1	2	1
EXPRESS NORTH	5	3	2	0	1
	4	0	1	3	1
TERMINAL A	4	1	1	2	1
TERMINAL B	5	2	1	2	1
TERMINAL C	4	1	1	2	1
TERMINAL D	4	3	1	4	2
TERMINAL E	5	3	0	2	1
5E	4	2	2	0	1
	3	0	0	3	1
	55	20	19	16	13

2
PARKING
PANELS

3
PARKING
PANELS

RED TOTALS DO NOT MATCH BOM

Location	Appendix E2 Lane no.	Federal Lane no.	Actual Freq	Frequency Plan	Lane Type	Notes	Comm Connection	Comm Connection	Reader Sync	Telebyte 8323	Promux 72-PMO-1	Opto 8	Telebyte 8022NX	MTX-487 FO Convert	MRX-487 FO convert	WME-7652 (Blue Comp bread box)	Chassis Plans (Blk Comp)	Fallover Board 7900-0029	SFO/Reader Mount plate 4510-1005	SFO Module	Reader Interface Board 7900-0022	Rockport 16 Port 97100-9	Astrodyne IMK76S-12	REL-70-4006	Pwr Sup Mount 2500-0007	Fiber patch	Cat 5e patch	SAU1500 Panel Mount	SAU1500RM2U Rack Mount	AVI Panel 20x24 (PART TAN BOX)	RF Mount Plate 4510-1006	RLC Panel 36x30	Dual RLC Panel 48x36	24x20x10 Encl	36x30x16 Encl	48x36x16 Encl	AC unit	CANTLEVER	Pelco 8 Ft Pa-panel Pole & Base				
Remote North (NSL)	Redundant Lane Controller																2			1							2		1														
	13-21	01	911.996	912	Entry		1 MMFO	1 MMFO	1	1	1	1		1	1				1		1		1	1	2	2					1				1								
	13-22	02	910	912	Entry	share AVI Panel																																					
	New Lane	85		916	Exit		2 copper	2 copper	1	1	1	1	1						1		1		1	1	2						1	1			1								
	New Lane	86		918	Exit		2 copper	2 copper	1	1	1	1	1	1					1		1		1	1	2						1	1			1								
	13-31	87	Locked	918	Exit		2 copper	2 copper	1	1	1	1	1						1		1		1	1	2						1	1			1								
Remote South (SSL)	Redundant lane Controller																2				1							2		1													
	14-21	05	911.99	912	Entry		1 MMFO	1 MMFO	1	1	1	1		1	1				1		1		1	1	2	2					1				1								
	14-22	06	912	912	Entry	share AVI Panel																																					
	New Lane	80		916	Exit		2 copper	2 copper	1	1	1	1	1						1		1		1	1	2						1	1			1								
	New Lane	81		920	Exit		2 copper	2 copper	1	1	1	1	1	1					1		1		1	1	2						1	1			1								
	14-31	82	Locked	920	Exit		2 copper	2 copper	1	1	1	1	1						1		1		1	1	2						1	1			1								
Express North (NW)	Redundant Lane Controller																																										
	05-21	01	910	918	Inner lot Entry		2 copper	2 copper	1	1	1	1	1						1		1		1	1	2						1	1			1					15'			
	05-31	11	910	918	Inner lot Exit	share AVI Panel																																		15'			
	05-22	02	902.248	908	Covered Entry		1 MMFO	1 MMFO	1	1	1	1		1	1								1	1	2	2					1	1			1					15'			
	05-23	03	910	906	Covered Entry		1 MMFO	1 MMFO	1	1	1	1		1	1				1		1		1	1	2	2					1				1								
	05-33	13	918	908	Covered Exit	share AVI Panel																																					
	Redundant Lane Controller																																										
	05-41	41	918.01	912	SRD		1 MMFO	1 MMFO	1	1	1	1		1	1								1	1	2	2					1	1			1					1			
	05-42A	42A	902.251	920	SRD Entry		1 MMFO	1 MMFO	1	1	1	1		1	1								1	1	2	2					1	1			1					1			
	05-42B	42B	902.251	920	SRD Exit	share AVI Panel																																		1			
05-32	12	902.246	922	Covered Exit		1 MMFO	1 MMFO	1	1	1	1		1	1									1	1	2	2					1	1			1					15'			
Express South (4W)	Redundant Lane Controller																4		2	2			2					4	1					1				1			1		
	08-21	01	902.245	908	Entry		2 copper	1 MMFO	1	1	1	1		1	1								1	1	2	2					1	1			1						15'		
	08-31	11	922.002	908	Exit	share AVI Panel																																		15'			
	08-22	02	911.997	910	Entry		1 MMFO	1 MMFO	1	1	1	1		1	1								1	1	2	2					1	1			1					12'			
	08-32	12	902.25	910	Exit	share AVI Panel																																		12'			
	Redundant Lane Controller																																										
	08-23	03	902.245	906	Entry	inner	1 MMFO	2 copper	1	1	1	1	1										1	1	2						1	1			1					12'			
	08-33	13	918	906	Exit	share AVI Panel																																		12'			
	08-41	41	918	922	SRD Entry		2 copper	2 copper	1	1	1	1	1										1	1	2						1	1			1					1			
	08-42	42	918	922	SRD Exit	share AVI Panel																																					

**North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support
Exhibit B – Preventative Maintenance Plan**

1.0 DESCRIPTION

This Preventative Maintenance Plan (PM Plan) shall identify the maintenance performed on a regular or scheduled basis by NTTA on the AVIL Lane Equipment installed and operational at DFW International Airport.

2.0 OBJECTIVES

The goal of this PM Plan is to ensure AVI Lane Equipment is maintained and facilities in satisfactory operating condition and/or extending the life of the equipment and to define the NTTA responsibilities, and Airport Board responsibilities related to such equipment.

3.0 ATTACHMENTS

3.1 Parking Services_PM v1.1

MAINTENANCE REQUIREMENTS

Maintenance services include preventive, predictive and corrective/emergency maintenance and provide adequate staffing levels to support maintenance activities at all facilities within the scope of this plan.

1.1 Parking Services Manager

The parking services manager is responsible for scheduling the work of crews, evaluating, providing second-level technical support, and interfacing with subcontract maintenance personnel.

They are responsible for receiving all defective parts, from the field. Also, for troubleshooting, diagnosing, and repairing this equipment to a much greater degree than can be accomplished in the field.

The manager's tasks include, but are not limited to:

Oversight of all lane maintenance

Scheduling of preventative maintenance

Provide second-level support

Ensure service level agreements are met

Ensure AVI read accuracy by reviewing data

Schedule site audits to ensure that proper maintenance is performed and that equipment is performing within specifications

Track KPI (Key Performance Indicators)

Ensure all maintenance is documented

1.2 Staffing

Staffing levels must be adequate to provide a continuous level of service regardless of holidays, vacations, and sick time. The Parking Systems Group is responsible for maintaining the level of service described within this document by augmenting assigned staff as required with experienced and skilled personal.

Response and repair requirements, system performance requirements, traffic statistics, coverage area and preventive maintenance hours are used to determine the size of the work force.

Table 1: Daily Preventive Maintenance Schedule		
Tasks	Estimated time per task	
Lane controller monitoring	45 minutes total	
Tollview		
System alarms and alerts		
AVI System	30 minutes total	
Tollview		
Review daily reports		
Reporting issues	15 minutes total	
On-site lane inspections	90 minutes total	
On-site gate inspections	15 minutes total	

2.0 Preventive Maintenance

Preventive maintenance is performed to provide for consistent operation of toll collection lane equipment. These activities are documented and tracked using performance indicators established in this document. Preventive maintenance consists of a comprehensive program performed daily and monthly. All types of such activities are given a time allotment to help managers determine staffing and labor needs. Schedules are established using the manufacturers' recommendations and established industry practices. They include technician assignments generated weekly.

Daily Preventive Maintenance Tasks

Perform a visual inspection of reader and antenna

Sample live lane traffic using TollView System

Visual inspection of gate equipment

Perform a visual inspection of the Lane Controller and all components in the rack

Review daily reports

Monthly Preventive Maintenance Tasks

Verify and test failover capability of readers

Verify configuration settings and adjust as required to match configuration standards

Baseline targeted lanes for RF power output at the reader, RF, and antenna

3.0 Predictive Maintenance

The Parking Systems Group uses historical maintenance data to predict maintenance needs. With experience and proper use of meantime between failure (MTBF) information, it is possible to schedule some part change-outs near the end of their expected service life, instead of waiting for failures to occur. This shifts a portion of the maintenance work to off-peak periods and is more efficient since it generally occurs during periodic scheduled maintenance visits.

**North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support
Exhibit C - Service Delivery Plan**

1.0 DESCRIPTION

This Service Level Delivery Plan shall identify how NTTA will meet the expectations of the SLA in the Master Project Agreement. It may include but is not limited to staffing, on-call procedures, escalation and communications processes.

2.0 OBJECTIVES

The goal of this Service Level Agreement and Delivery Plan is to maintain normal operations of all AVI Lane Equipment and to define the services to be performed, performance period, response time, NTTA responsibilities, and Airport Board responsibilities.

3.0 DEFINITIONS

- 3.1 Availability – refers to the AVI Lane availability as set forth in the Mast Project Agreement Section 8.2. Planned downtime is not included in a measurement of availability.
- 3.2 Recovery Time – The total time required for a planned outage or the time required to fully recover from an unplanned outage. Recovery time is closely related to availability.
- 3.3 Planned downtime – planned downtime is a result of maintenance that is disruptive to system operation and usually cannot be avoided with a currently installed system design. Planned downtime events might include patches to system software that require a reboot or system configuration changes that only take effect upon a reboot. In general, planned downtime is usually the result of some logical, management-initiated event.
- 3.4 Unplanned downtime - Unplanned downtime events typically arise from some physical event, such as a hardware or software failure or environmental anomaly. Examples of unplanned downtime events include power outages, failed CPU or RAM components (or possibly other failed hardware components), an over-temperature related shutdown, logically or physically severed network connections, catastrophic security breaches, or various application, middleware, and operating system failures.

4.0 SERVICE LEVEL DELIVERY PLAN

- 4.1 The measurement of availability shall only be based on events within NTTA's control and with due consideration for the definitions contained in this Exhibit. If the measured item is not available due to reasons outside of NTTA's control, such as but not limited to, problems with the wide area network and local area network, such events will be excluded from the measurement of availability.
 - 4.1.1 Planned downtime shall not be included in the measure of availability.
 - 4.1.2 Unplanned downtime related to the AVI Lane Equipment shall be included in the measure of availability and response times classified according to the AVI Lane Equipment availability criteria set forth in the Project Agreement.

North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support
Exhibit C - Service Delivery Plan

- 4.2 NTTA will be the primary contact for all service calls associated with the AVI Lane Equipment. NTTA will work with DFW staff until the AVI Lane Equipment service call is resolved.
- 4.3 If a call/incident is determined to be a DFW issue, NTTA staff shall pass responsibility for the call resolution to the appropriate DFW staff representative.
- 4.4 Hours of Service
- 4.4.1 NTTA Parking staff hours are from 8am-5pm, Monday thru Friday.
- 4.4.2 NTTA Parking provides 24/7 on call coverage.
- 4.5 Service Call Response Time
- 4.5.1 NTTA Parking On-Call provides 30 minute telephone response time to all AVI Lane Equipment calls during Peak Operational Hours.
- 4.5.2 NTTA provides escalation support for any AVI Lane Equipment call not meeting the first response time.
- 4.5.3 NTTA shall maintain an understanding of the DFW Peak Holiday Travel Times and will coordinate efforts to have staff available to respond as agreed to in advance with DFW staff during these times.
- 4.6 Service Call Resolution Time
- 4.6.1 NTTA shall make reasonable effort to adhere to the Service Call Resolution Times in Section 8.4 of the Master Project Agreement.
- 4.6.2 In the event NTTA staff becomes aware that an AVI Lane Equipment call resolution may not be met within the resolution time allotted, they will follow escalation procedures and notify the appropriate parties at NTTA and DFW with an estimated time to completion and remediation plan for the AVI Lane Equipment call.
- 4.7 Escalation Procedures and Communication Plan
- 4.7.1 NTTA shall provide and maintain a Communication Plan for the purposes of AVI Lane Equipment call/incident escalation.
- 4.7.2 NTTA and DFW staff who shall receive notifications for AVI Lane Equipment calls/incidents will be identified in the plan.
- 4.7.3 DFW's internal escalation procedures should make every effort to notify the proper the NTTA representative in the event of an AVI Lane Equipment call/incident escalation.
- 4.8 Service Delivery Plan Documentation
- 4.8.1 NTTA shall maintain documentation for all AVIL Lane Equipment calls including but not limited to service call detail, Heat tickets, and resolution details as part of regular business operations.
- 4.9 Escalation of Emergency Situations:
- 4.9.1 First Level Support – During Peak Operational Hours, NTTA will respond to Emergency AVI Lane Equipment service calls within 30 minutes from receipt of the call from DFW AOC or DFW Help Desk. NTTA shall investigate the trouble reported and make reasonable efforts to correct the problem within four (4) hours from receipt of call.

North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support
Exhibit C - Service Delivery Plan

- 4.9.2 Second Level Support - If the Emergency AVI Lane Equipment service call is not resolved within four (4) hours, or the service call is beyond the capabilities of First Level Support, the AVI Lane Equipment service call is escalated to Second Level Support. Escalation to Second Level will follow the NTTAs Communication Plan.
- 4.9.3 Third Level Support - If the Emergency AVI Lane Equipment service call is not resolved within eight (8) hours, it is elevated to Third Level Support. Escalation to Second Level will follow the NTTAs Communication Plan.
- 4.10 Service Level Delivery Plan records, procedures, tools and reports are subject to inspection by authorized Airport Board and NTTA representatives at any time.
- 4.11 Based upon the review and an analysis of the metrics, NTTA shall address and remedy any systematic problems or negative performance trends.
- 4.12 If Service Levels fall below minimums or service call resolution time exceeds fifteen percent (15%) of the total for reported service calls for one quarter, then the NTTA shall submit a plan for review and approval by the Airport to restore Service Levels at no cost to the Airport.
- 4.13 The Service Delivery Plan will be reviewed annually by the Airport Board's Designated Technical Representative, the PBU, and NTTA, and may be modified if required and mutually agreed upon in writing.

5.0 ATTACHMENTS

- 5.1 DFW/NTTA Communications Plan 03012010

NTTA/DFW Application Support Communications Process

The purpose of this document is to outline the protocol for support communications between NTTA and DFW. The NTTA strives to provide optimum support to DFW application users. In order to achieve this goal, issues should be reported through the process outlined below.

Customer Service

Users can notify the NTTA of any customer service requests by emailing cscinteropdesk@ntta.org which will go to select Customer Service Specialists to resolve issues. Responses will be directed to individual who submitted the original request.

After Hours Customer Service

Users can call **Robbie Jacobson** for after hours support at **469-853-1835**. This should only be used for critical needs that cannot wait until the next business day.

Customer Service Escalation

If a customer service request is made and is not addressed in a timely manner or a response is not received, the following escalation path may be used:

Name	Title	Desk Phone	Cell Phone	Email
Naderge Williams	CSC Team Leader - IOP desk	214-461-2014		nwilliams@ntta.org
Robbie Jacobson	Support Services Manager	214-224-2129	469-853-1835	rjacobson@ntta.org
John Bannerman	Director of Customer Service	214-461-2077	214-325-1946	jbannerman@ntta.org

Application Support

Users can notify the NTTA of any application issues by using the DFW ticketing system which will be sent to the following NTTA distribution list(s): DFW-Support@ntta.org. This email distribution contains support and personnel from NTTA and ETCC, as well as representatives from the NTTA Customer Service Center.

NTTA will provide responses and resolution to reported issues to the following distribution list(s): GatewayAPPCCB@dfwairport.com.

After Hours Application Support

Users can call for after hours support by using the attached on-call list.



RITE Apps On-Call
2009.xlsx

Application Support Escalation

If application support requests are not resolved in a timely manner or a response is not received, the following escalation path may be used:

Name	Title	Desk Phone	Cell Phone	Email
Randi Oldham	RITE Applications Manager	214-461-2071	214-325-5529	roidham@ntta.org
Dave Pounds	Director of Information Technology	214-461-2025	972-765-4701	dpounds@ntta.org

DFW Contacts and Notifications

The NTTA will use the DFW distribution list dfwgatewayusers@dfwairport.com as the primary communication outlet for reporting scheduled maintenance windows or downtime. The following contacts can be used for communication and issue resolution within specific functional areas of DFW operations.

Name	Title	Desk Phone	Email
Kim McKay	Manager, Parking Guest Relations	972-973-4859	kmckay@dfwairport.com
David Galloway	Transportation Coordinator - Ground Transportation	972-574-8812	dgalloway@dfwairport.com
Mike Rutland	ITS Parking Operation Support Manager	972-415-5262	mrutland@dfwairport.com
Bill Johnson	AVP Systems Operations	972-973-5350	bjohnson@dfwairport.com

Lane Support

Users can notify the NTTA of any TollTag Reader Lane Support issues at any time by contacting the on call NTTA technician at **214-924-0737**.

Lane Support Escalation

If the NTTA on call technician does not respond or the reported issue is not resolved in a timely manner, the following escalation path may be used:

Name	Title	Cell Phone	Email
Sean Duncan	Parking Systems Manager	214-907-0224	sduncan@ntta.org
Barry Weems	Assistant Director of IT – Roadway Systems	214-325-5519	bweems@ntta.org
Dave Pounds	Director of Information Technology	214-243-5336	dpounds@ntta.org

North Texas Tollway Authority – AVI System
Master Interlocal Agreement 7005264
Project Agreement No. 1 – Lane Equipment Maintenance and Support
Exhibit D - Rates, Charges and Adjustments

1.0 DESCRIPTION

This Exhibit D – Rates, Charges and Annual Adjustments – shall identify how NTTA will be compensated for lane equipment maintenance and support as set forth in Project Agreement No. 1 and its Exhibits.

2.0 OBJECTIVES

The goal of this Exhibit D – Rates, Charges and Annual Adjustments – is to ensure NTTA is compensated in an amount not less than NTTA's actual costs in providing lane equipment maintenance and support plus five percent (5%).

3.0 RATES, CHARGES AND ANNUAL ADJUSTMENTS

- 3.1 In consideration of the maintenance and support provided by NTTA to the Airport Board for AVI Lane Equipment, the Airport Board shall remit to NTTA \$286 per lane in operation, per month.
- 3.2 At the time of this agreement, there are 64 operational lanes at DFW Airport under this Agreement.
- 3.3 As additional lanes are added or subtracted from the total count, the amount to be remitted to NTTA shall change and will be reflected on the monthly invoice from NTTA to the Airport Board.
- 3.4 No later than July 1 of each year during which this agreement is in effect, the NTTA shall submit to the Airport Board a notice specifying the rate for per lane AVI lane equipment maintenance and support that it proposes for the next 12-month period.
- 3.5 NTTA's proposed per lane AVI lane equipment maintenance and support fees will be based on historical cost data and shall not be less than actual costs incurred by NTTA to process Airport Charges plus five (5) percent.
- 3.6 The new per lane AVI lane equipment maintenance and support fees shall become effective 60 days after notice or on such a date as agreed to by NTTA and the Airport Board.
- 3.7 The Airport Board shall provide response to NTTA regarding per lane AVI lane equipment maintenance and support fee changes within 10 days of notice.
- 3.8 If an agreement cannot be reached within 30 days, and if this Agreement is not terminated, the per lane AVI lane equipment maintenance and support fees shall increase by 3% per lane and shall be effective 60 days from initial notice until such time as this Agreement either is so terminated or the Airport Board and the NTTA reach an agreement on per lane AVI lane equipment maintenance and support fees.

GENERAL CONTRACT INFORMATION

NEW CONTRACT ALL INFORMATION MUST BE ENTERED IN THIS CATEGORY

CONTRACTOR CONTACT INFORMATION**RESPONSIBLE DEPARTMENT INFORMATION**

CONTRACT HEADER INFORMATION					
Contract Number:					
Contract Title:					
Contract Type:					
Contract Status:					
Contract Start Date:					
Contract End Date:					
Contract Value:					
Contract Owner:					
Contract Manager:					
Contract Location:					
Contract Description:					
Contract Terms:					
Contract Conditions:					
Contract Documents:					
Contract Attachments:					
Contract History:					
Contract Notes:					
Contract Comments:					
Contract Actions:					
Contract Alerts:					
Contract Reports:					
Contract Analytics:					
Contract Dashboard:					
Contract Settings:					
Contract Help:					
Contract Support:					
Contract Feedback:					
Contract Privacy:					
Contract Security:					
Contract Compliance:					
Contract Risk:					
Contract Quality:					
Contract Sustainability:					
Contract Innovation:					
Contract Collaboration:					
Contract Communication:					
Contract Engagement:					
Contract Satisfaction:					
Contract Loyalty:					
Contract Retention:					
Contract Renewal:					
Contract Termination:					
Contract Dispute:					
Contract Arbitration:					
Contract Litigation:					
Contract Mediation:					
Contract Conciliation:					
Contract Reconciliation:					
Contract Settlement:					
Contract Resolution:					
Contract Closure:					
Contract Archiving:					
Contract Backup:					
Contract Restore:					
Contract Migration:					
Contract Integration:					
Contract Interoperability:					
Contract Compatibility:					
Contract Scalability:					
Contract Flexibility:					
Contract Adaptability:					
Contract Resilience:					
Contract Robustness:					
Contract Reliability:					
Contract Availability:					
Contract Performance:					
Contract Efficiency:					
Contract Effectiveness:					
Contract Impact:					
Contract Influence:					
Contract Contribution:					
Contract Benefit:					
Contract Advantage:					
Contract Edge:					
Contract Strength:					
Contract Power:					
Contract Authority:					
Contract Credibility:					
Contract Trustworthiness:					
Contract Integrity:					
Contract Honesty:					
Contract Transparency:					
Contract Accountability:					
Contract Responsibility:					
Contract Commitment:					
Contract Dedication:					
Contract Devotion:					
Contract Fidelity:					
Contract Loyalty:					
Contract Allegiance:					
Contract Obedience:					
Contract Submission:					
Contract Compliance:					
Contract Adherence:					
Contract Conformity:					
Contract Correspondence:					
Contract Consistency:					
Contract Coherence:					
Contract Cohesion:					
Contract Unity:					
Contract Harmony:					
Contract Balance:					
Contract Proportionality:					
Contract Fairness:					
Contract Justice:					
Contract Equity:					
Contract Reasonableness:					
Contract Moderation:					
Contract Temperance:					
Contract Self-control:					
Contract Restraint:					
Contract Discipline:					
Contract Order:					
Contract Organization:					
Contract Structure:					
Contract Framework:					
Contract System:					
Contract Mechanism:					
Contract Process:					
Contract Procedure:					
Contract Protocol:					
Contract Policy:					
Contract Regulation:					
Contract Control:					
Contract Management:					
Contract Administration:					
Contract Supervision:					
Contract Oversight:					
Contract Monitoring:					
Contract Evaluation:					
Contract Assessment:					
Contract Analysis:					
Contract Review:					
Contract Audit:					
Contract Inspection:					
Contract Examination:					
Contract Investigation:					
Contract Inquiry:					
Contract Questioning:					
Contract Interrogation:					
Contract Examination:					
Contract Scrutiny:					
Contract Surveillance:					
Contract Observation:					
Contract Watching:					
Contract Looking:					
Contract Seeing:					
Contract Viewing:					

CONTRACT CHANGE(S)

CONTRACT VALUE OR TERM CHANGES	
Contract Value	
Contract Term	

➡➡➡➡➡➡➡ ATTACHMENT(S)

→→→→→→→→→→ ATTACHMENT ☒ APPROVED REQUISITION(S) ATTACHED

ADDITIONAL COMMENTS / SPECIAL INSTRUCTIONS:

BOARD APPROVAL DATE:

CONTRACT ENTRY FORM SUBMITTAL, ENTRY, APPROVAL SECTION

AE