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History of Environment Conservation Activities at Narita Airport

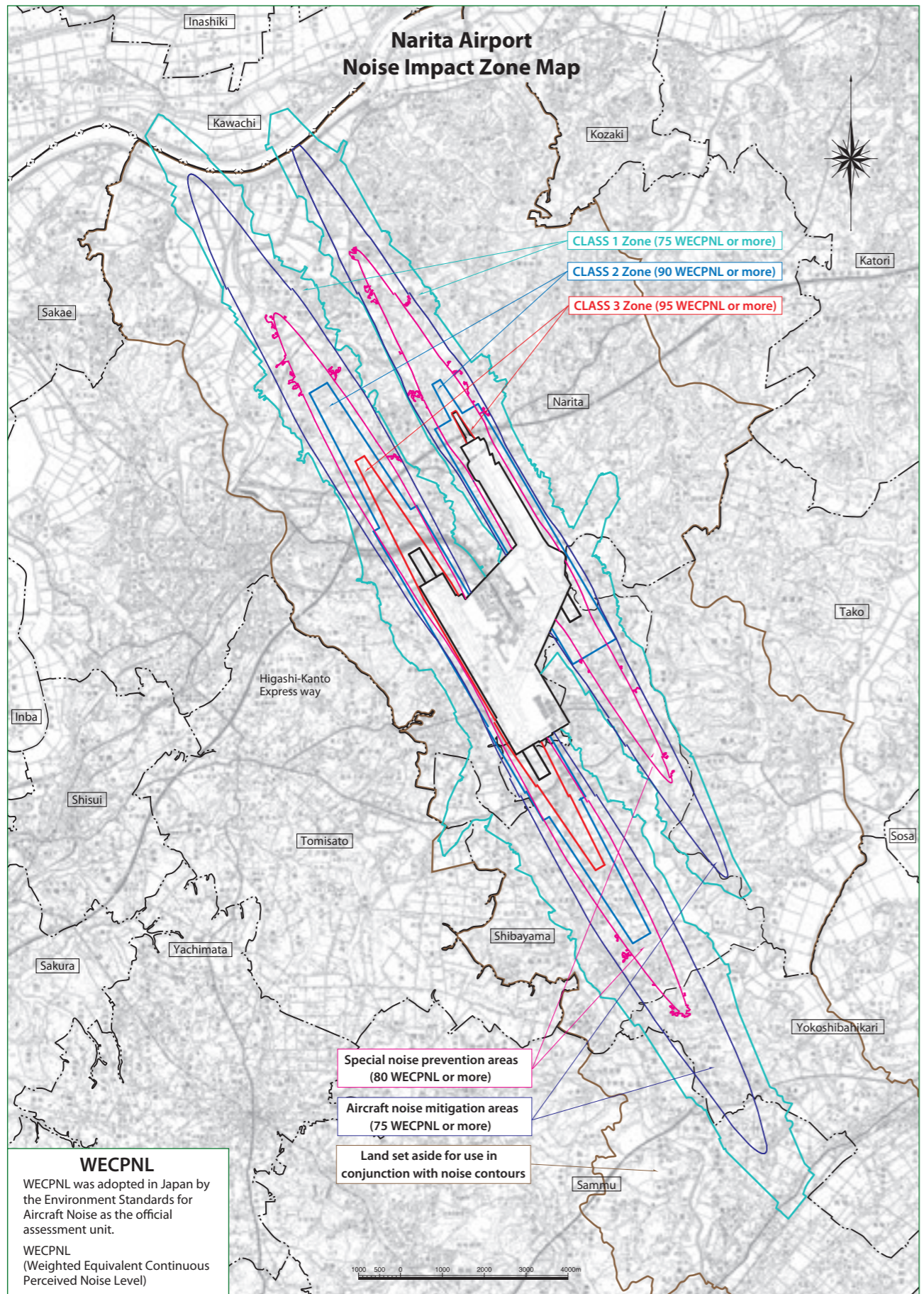
Item	Date	Environment & Community Relations
Transport minister refers question of prospective sites and scale of New Tokyo International Airport to Council for Civil Aviation	1963. 8	
Council for Civil Aviation responds to minister	1963.12	
New Tokyo International Airport Authority Law promulgated	1965. 6	
Ordinance issued designating site of New Tokyo International Airport	1966. 7	
New Tokyo International Airport Authority established	1966. 7	
Master Plan released	1966.12	
Action approved under Land Expropriation Act	1969.12	
First expropriation action	1971. 2	
Second expropriation action	1971. 9	
	1976. 1	Noise impact zones designated (Class1 85 WECPNL Class 2 90 WECPNL Class3 95 WECPNL)
Aerodrome and navigation aids certification	1977.11	
Left wing extremists destroy 16th floor of air traffic control tower	1978. 3	
	1978. 4	Promulgation of Special Measures Law Concerning Aircraft Noise Prevention Strategies Around Specified Airports
Airport opens	1978. 5	
	1978. 9	Applications open for complete residential soundproofing
	1979. 7	Expansion of Class 1 noise impact zone (80 WECPNL) announced
	1982. 3	Expansion of Class 1 noise impact zone (75 WECPNL) announced
	1985. 7	Noise impact zones announced for Runways B & C
Commencement of Phase II of airport development project	1986.11	
Kitahara opposition group disbands, amalgamates with Ogawa group	1987. 9	
	1990. 1	Transport Minister Eto meets with Atsuta opposition group farmers
	1990. 3	Slots increase from 340 a day to 350
	1990.11	Regional Promotion Liaison Council established
	1990.12	Slots increase from 350 a day to 360
	1991. 2	Local federation calls for public symposium
Direct rail service to Narita Airport Station launched	1991. 3	
	1991.11	1st Symposium on Narita Airport Issues
Opening of Terminal 2	1992.12	
	1993. 5	15th Symposium on Narita Airport Issues
	1993. 6	Gov't withdraws application to courts for seizure of unacquired land
	1993. 9	1st Roundtable Conference on Narita Issues
	1993.11	Narita TV relay tower begins transmission
	1994. 4	Community consultation centers opened
	1994.10	12th Roundtable Conference on Narita Issues
	1994.10	All participants accept final recommendations of Sumiya Board of Inquiry, Roundtable Conference retires
	1994.12	Expanded Roundtable Conference Steering Comm.
	1995. 1	1st session of Committee for Symbiosis between the Airport and the Local Community
	1995. 1	Sawara relay tower begins transmission
	1995. 1	1st session of Concept Implementation Committee for an Experimental Village Encompassing Global Issues
	1995. 1	1st session of Regional Environmental Committee
	1995. 2	Edosaki relay tower begins transmission
	1995. 3	Airport Information Center, Area Consultation Office and Symbiosis Committee consultation offices open
	1995. 3	Shimofusa Hikari relay tower begins transmission
	1995. 3	Greening Master Plan for Narita Airport and Environs announced
	1995.10	Subsidy system launched to provide additional soundproofing for reconstruction of soundproofed houses
	1996. 4	Environmental Report Volume 1 released
Narita Airport Authority headquarters moves to Narita Airport	1996. 7	
	1996. 8	Committee for Symbiosis between the Airport and the Local Community asks for blueprint and schedule for integrated development of airport and region
	1996.10	Ministry of Transport releases Fundamental Concept on Symbiosis Between Narita Airport and the Local Community in the Future and the Development of the Airport and the Local Community
	1997. 4	Aircraft noise monitor system operational
	1997. 4	NAA Information Corner opens on 1st floor of NAA Building
	1997. 6	Regional Symbiosis Promotion Headquarters and Airport Development Promotion Headquarters established – North Area Consultation Office also opens
	1997. 7	Narita Airport Regional Symbiosis Promotion Foundation established
	1997. 9	Weather information available by fax and telephone
Opening of Satellite 1 in Terminal 1	1998. 2	Eco-Airport Promotion Workgroup establishment
	1998. 3	Improved flight path information service at the Airport Information Center
	1998. 4	Environment Information System online
	1998. 4	Restrictions imposed on APUs
	1998. 4	Slots increase from 360 a day to 370
	1998. 5	22nd and final session of the Concept Implementation Committee for an Experimental Village Encompassing Global Issues; Final report
	1998. 5	Fundamental Blueprint for an Eco-Airport announced
	1998. 7	Outline of Airport Construction Geared to Symbiosis announced by Ministry of Transport and NAA
	1998.12	Outline of Airport Construction Geared to Symbiosis released by Ministry of Transport and NAA
	1999. 2	Low pollution vehicle plan drawn up
North Wing and new Central Building section opened in Terminal 1; South Wing closed	1999. 3	
	1999. 4	NRH (Noise Reduction Hangar) completed
Fiscal 2000 target for parallel runway abandoned	1999. 5	
Council to promote the prompt completion of Narita Airport submits petition with 260,000 signatures to Minister of Transport	1999. 5	

Item	Date	Environment & Community Relations
Ministry issues new directive to NAA President & CEO on parallel runway project	1999. 5	
Ministry of Transport and NAA announce change in direction on construction of parallel runway	1999. 6	
Parallel runway policy change incorporated in Environmental Conclusions (Part 2)	1999. 8	
Application lodged to modify works program for parallel runway construction	1999. 9	
Public hearing held concerning the application to modify the works program for the parallel runway construction	1999.10	Solar power generation system commissioned
Work on parallel runway commences after ceremony for safety of project	1999.12	
	2000. 4	Eco-Airport Corner opened in Museum of Aeronautical Science
Opening of Satellite 2 in Terminal 1	2000. 7	
	2001. 3	Narita Airport Eco Station opens
	2001. 4	Two air quality monitoring stations opened on interim parallel runway
	2001. 5	Special Noise Prevention Areas and Noise Prevention Areas allocated
Construction of interim parallel runway completed	2001.10	
	2002. 3	Development of discharge canals and wetland environments begins
Opening of interim parallel runway	2002. 4	16 unattended noise monitoring stations for interim parallel runway become operational
	2002. 4	Environmental Information System and Flight Path Information Display System revamped
	2002. 4	Noise demonstration rooms opened in Airport Information Center and Museum of Aeronautical Science
	2002. 7	Thermal Storage System commissioned
Narita Airport South Gate opened	2002.10	
Shibayama Railway opened	2002.10	
Satellite 3 in Terminal 1 opened	2002.12	
	2003. 3	Sanrizuka Sakura no Oka opened
Tennami cargo warehouse opened	2003. 4	Minami Sanrizuka walking trail opened
Narita International Airport Corporation Law promulgated	2003. 7	
Airport South Cargo Bldg. opened	2003. 8	
	2004. 2	Eco-Airport Development and Planning Office established
Narita International Airport Corporation Founded	2004. 4	Eco-Airport Promotion Committee and Council established
	2004. 9	Environment master policy formulated
Opening of Satellite 1 in Terminal 4	2004.11	
	2005. 1	Development of neighborhood forest walking trails in conjunction with Chiba prefecture, Narita city and Narita Airport local hotels association
	2005. 1	Eco-Airport Development and Planning Council established
	2005. 1	Greenport Eco-Agripark announced
	2005. 3	Eco-Airport Master Plan (Fiscal 2005–2010) formulated
	2005. 6	Narita Airport Eco-Festa, Narita Airport Eco-Kids Club founded
NAA reports to minister on northern extension option for parallel runway	2005. 7	Organic farming school opens
Minister issues development directive for 2,500-meter parallel runway under northern extension proposal	2005. 8	
	2005.10	New international landing charges based on aircraft noise levels
	2005.10	Northern extension proposal for parallel runway put to local communities
	2005.12	Waste sorting in passenger terminals expanded
South Wing/Satellite 5 in Terminal 1 open	2006. 6	
Application for airfield change for parallel runway development	2006. 7	Release of environmental conclusions for Parallel runway development
Public meeting held on application for airfield change	2006. 8	
Application for airfield change approved	2006. 9	
	2007. 3	Additional noise impact zones announced for northern extension (Class 1: 75 WECPNL; Class 2: 90 WECPNL; Class 3: 95 WECPNL)
Narita International Airport Corporation headquarters moves to new building	2007. 4	
	2007.12	Announcement of partial amendment to environment standards for aircraft noise Change in noise index: WECPNL → Lden (commencing: 1 April 2013)
	2007.12	Special noise prevention areas for northern extension Change in aircraft noise prevention areas
	2008. 3	Narita International Airport City Planning Promotion Council announces possibility of expanding airport capacity to 300,000 flights a year and releases provisional calculations
	2008.11	Decision to end late-night/early morning curfew on parallel runway
	2009. 1	Confirmation document on further capacity expansion of Narita Airport signed at the meeting of the Four Party Council on Narita Airport
FedEx freighter overturns while landing, killing 2 pilots	2009. 3	
	2009. 4	Environment information system, Narita Airport Environment Community, revamped
	2009. 7	External power supply system installed in the truck holding yard
2,500-meter Runway B opened 5 months ahead of schedule	2009.10	
	2009.12	Four Party Council on Narita Airport announces expected noise contours for 300,000 flights, fundamental stance on environment and community integration measures, and facility development plans for capacity expansion
Annual slots expanded to 220,000 flights	2010. 3	
Application for airport change regarding construction of taxiways on western side of Runway B and Yokobori district	2010. 4	Release of environmental conclusions for construction of taxiways on western side of Runway B
Public meeting held on application for airport change regarding construction of taxiways on western side of Runway B and Yokobori district	2010. 5	
Application for airport change regarding construction of taxiways on western side of Runway B and Yokobori district approved	2010. 6	
Narita Sky Access opened, minimum traveling time between Tokyo and Narita Airport shortened to 36 minutes	2010. 7	
Work commences on the western taxiway for Runway B	2010. 7	
	2010.10	Four Party Council on Narita Airport reaches agreement on Note of Confirmation on Capacity Expansion (300,000 slots a year)
Additional corporate jet bays assigned and permissible layover time extended	2010.12	
	2011. 2	Release of environmental conclusions for construction of taxiways on Yokobori district
	2011. 2	Narita hydrogen station commences operation
Great East Japan Earthquake	2011. 3	Additional external power supply systems for trucks installed in the truck holding yard, Airport South Cargo Area
	2011. 4	Eco-Airport Vision 2020 and the Eco-Airport Master Plan (Fiscal 2011–2015) formulated
	2011. 6	Narita Airport Historical Museum opens

*From fiscal 2009, the parallel runway is referred to as Runway B.

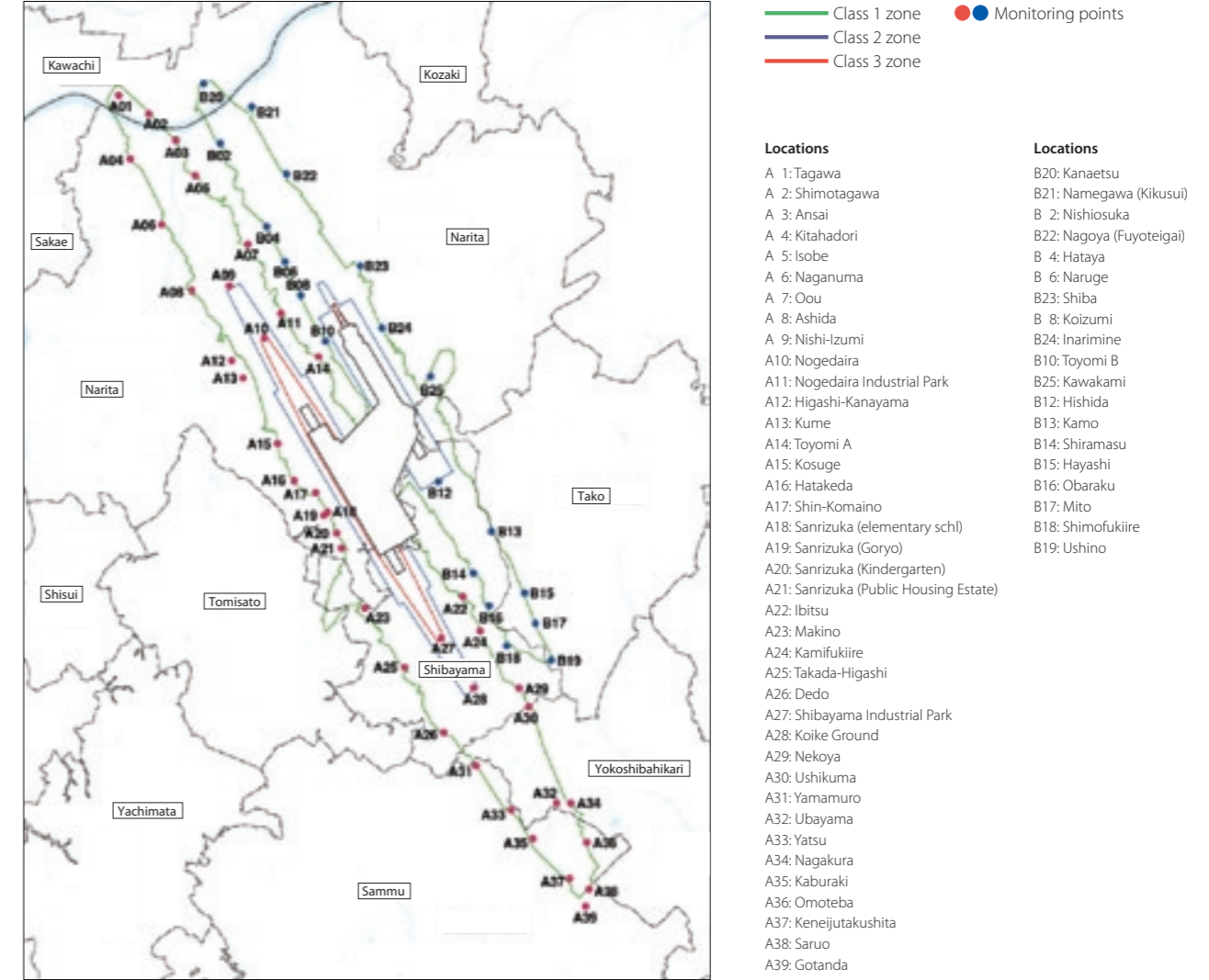
Narita Airport Noise Impact Zone Map

As of 31 March 2011



This map is an approved copy of a 1/50,000 scale map issued by the Director General of the Geographical Survey Institute (Approval No. 2006 Kanfuku No. 176)

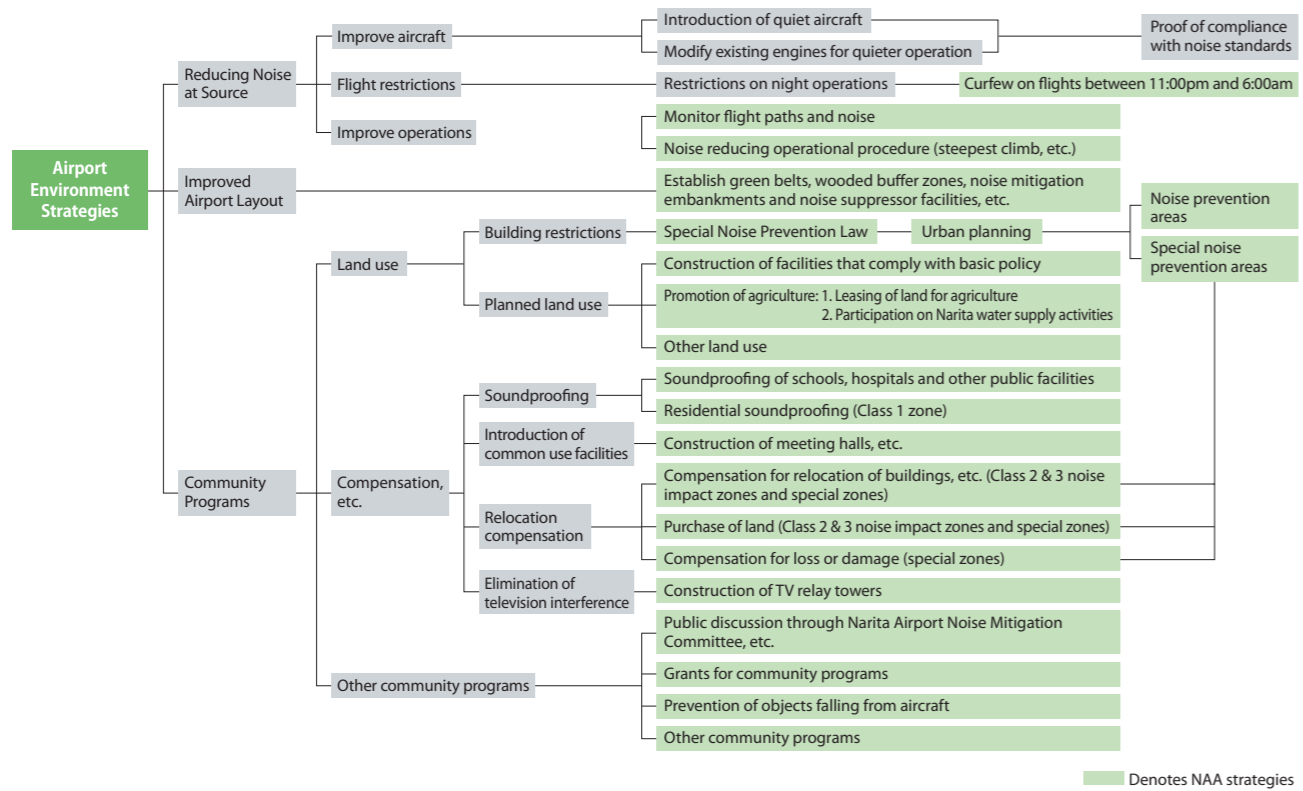
Short-Term Aircraft Noise Monitoring Location Map



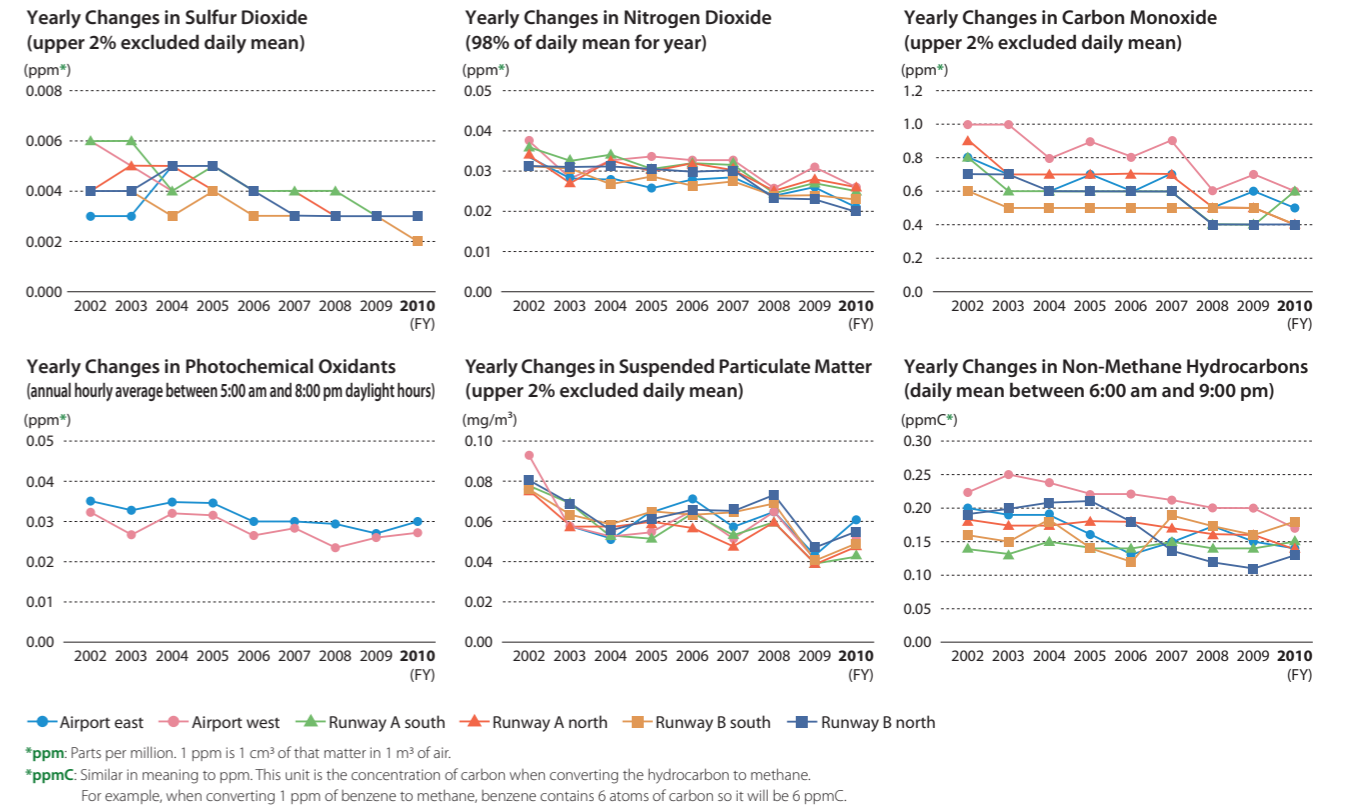
Short-Term Aircraft Noise Monitoring Results (Fiscal 2010)

Runway A		Runway B	
Location No.	WECPNL	Location No.	WECPNL
A1	67.8	A21	71.2
A2	68.6	A22	71.6
A3	66.9	A23	68.3
A4	67.2	A24	71.2
A5	67.8	A25	67.6
A6	67.3	A26	66.4
A7	67.9	A27	80.9
A8	67.4	A28	76.4
A9	76.1	A29	70.3
A10	80.1	A30	70.2
A11	72.8	A31	68.7
A12	68.2	A32	71.3
A13	70.7	A33	69.4
A14	70.4	A34	69.9
A15	70.7	A35	69.6
A16	67.5	A36	71.1
A17	71.5	A37	70.0
A18	70.2	A38	69.9
A19	67.1	A39	69.3
A20	71.1		
		B20	69.0
		B21	63.9
		B2	68.1
		B22	64.3
		B4	68.5
		B6	68.4
		B23	59.8
		B8	67.6
		B24	65.2
		B10	70.2
		B25	62.3
		B12	77.4
		B13	64.5
		B14	69.0
		B15	65.5
		B16	69.6
		B17	67.7
		B18	68.1
		B19	67.9

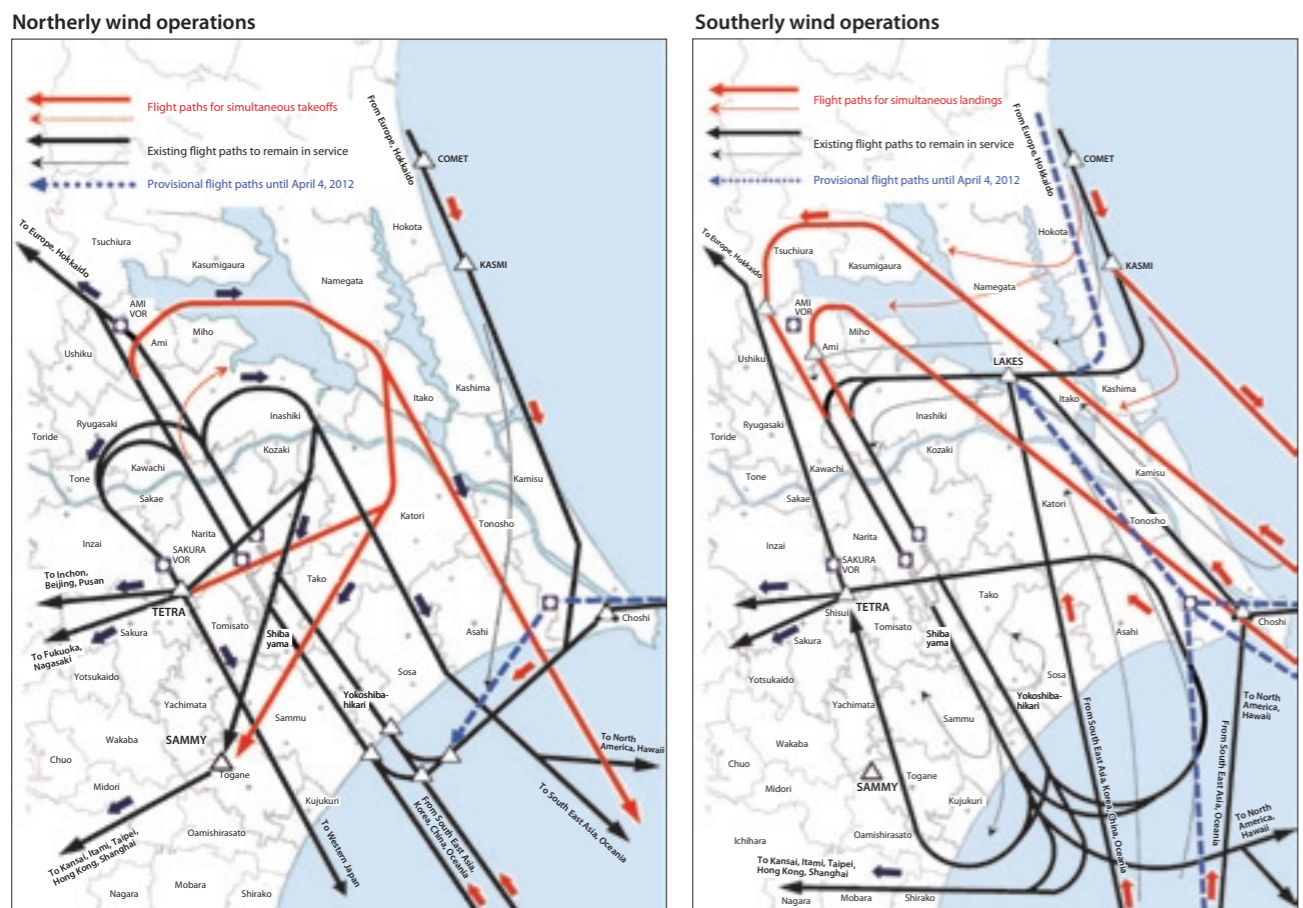
Diagram of Local Environment Strategy Framework at Narita Airport



Graph of Air Quality Monitoring Results (refer to page 34)



Standard Flight Tracks



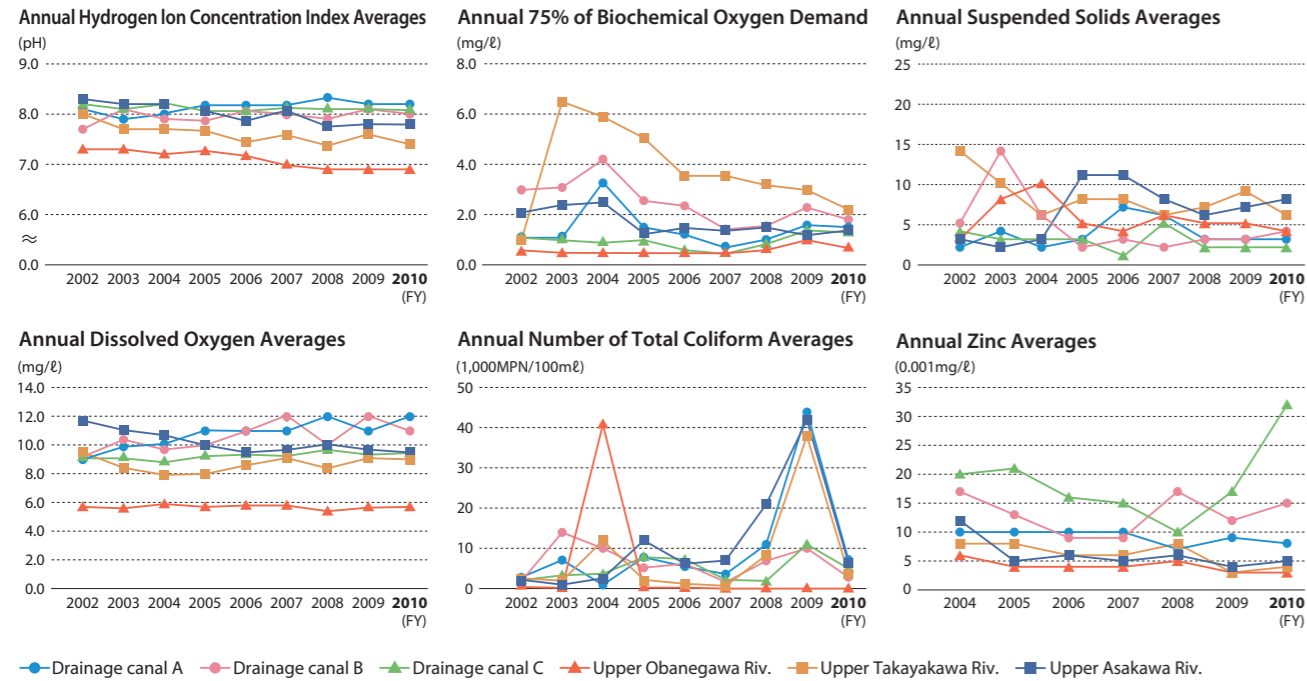
*Aircraft occasionally deviate from standard flight tracks due to high level cross winds, bad weather and for separation purposes.

Air Quality Monitoring Results (Fiscal 2010) As Compared with Assessment Method Using Environmental Standards

Items monitored	Sulfur dioxide	Nitrogen dioxide	Carbon monoxide	Photochemical oxidants	Suspended particulate matter
Assessment Methods Using Environmental Standards	The upper 2% excluded daily mean is a maximum of 0.04 ppm and the daily mean does not exceed 0.04 ppm on any two consecutive days.	98% daily mean is a maximum of 0.06 ppm.	The upper 2% excluded daily mean is a maximum of 10 ppm and the daily mean does not exceed 10 ppm on any two consecutive days.	The hourly value is a maximum of 0.06 ppm.	The upper 2% excluded daily mean is a maximum of 0.1 mg/m ³ and the daily mean does not exceed 0.1 mg/m ³ on any two consecutive days.
Chiba prefecture targets		98% daily mean 0.04 ppm			
Description	Upper 2% excluded daily mean (ppm)	98% yearly daily mean (ppm)	Upper 2% excluded daily mean (ppm)	Comparison with environmental standards (Days) (Hours)	Comparison with environmental standards (mg/m ³)
Station name					
Airport east	0.002	0.021	0.5	60 304 ×	0.061 N ○
Airport west	0.003	0.026	0.6	44 202 ×	0.052 N ○
Runway A south	0.003	0.025	0.6		0.043 N ○
Runway A north	0.003	0.026	0.4		0.048 N ○
Runway B south	0.002	0.023	0.4		0.049 N ○
Runway B north	0.003	0.020	0.4		0.055 N ○

Note 1: In the comparison with environmental standards, a circle (○) denotes the value is within the standards and a cross (x) denotes the value has exceeded the standards.
 Note 2: Photochemical oxidants are for daylight hours (between 5:00 am and 8:00 pm).
 Note 3: Readings for all items result from long-term monitoring over a valid period of 6,000 hours.

Graph of Periodic Water Quality Monitoring Results (refer to page 35)



Narita Airport Regional Symbiosis Promotion Foundation

Narita Airport Regional Symbiosis Promotion Foundation was established in July 1997 to augment the community relations policies implemented by NAA and provide more closely tailored solutions to bring Narita Airport and the local community closer together. The Foundation began operating in October the same year.

(a) Soundproofing of residential buildings

Partially subsidizes the costs of soundproofing for designated houses belonging to residents living in or adjacent to Class 1 noise impact zones.

(b) Local noise prevention projects

Involved with 3 projects designed to contribute to building a healthy local environment.

- Resident health related matters resulting from exposure to aircraft noise
- Lectures, courses and similar activities related to environmental problems
- Assistance with residential environment improvements associated with relocation from noise impact zones

(c) Aircraft noise monitoring

Compiles aircraft noise readings from local governments and NAA, provides a central, objective assessment point and releases that information to the public.

(d) Studies and research into aircraft noise, etc.

Undertakes studies and research for more precise aircraft noise monitoring.

Residential Soundproofing Subsidization by Foundation

Category	Activity	Recipients
Adjacent Area	Residential soundproofing in adjacent areas	Dwellings used for residential purposes which were located in areas designated by the Foundation on 1 October 1997 as being adjacent to Class 1 noise impact zones
	Soundproofing for refurbished dwellings	Dwellings used for residential purposes as of 1 October 1997 which were previously soundproofed with subsidies from NAA and were refurbished prior to 31 March 1995
Class 1 Noise Zone	Soundproofing on dwellings erected after enactment	Dwellings used for residential purposes as of 1 October 1997, constructed since the day following the enactment of the Special Noise Law (30 March 1982 for Runway A, 1 July 1985 for parallel and crosswind runway)
	Additional air conditioning	Dwellings in which air conditioning units installed during NAA soundproofing, did not meet the prescribed number according to the method used at the time of soundproofing and according to the number of people in the household as of 1 October 1997
	Soundproofing for houses of heirs	Dwellings built to house the children or heirs of the residents in the current domicile as of 1 October 1997
	Window frame replacement	Dwellings that have been soundproofed with NAA or Foundation subsidies and which require upgrading to maintain soundproofing properties

Guide to Airport Related Inquiries and Public Information Sources

Members of the public who wish to inquire matters relating to the airport and browse or obtain information releases may use the following centers. Consultation concerning relocation is conducted at the North and South Consultation Centers.

North Area Consultation Center
Address: 3rd Floor, Chiba Kotsu Bldg., 750-1 Hanasaki, Narita City, Chiba Prefecture
Tel: 81-(0)476-24-5361
Fax: 81-(0)476-24-5370
Business hours: Mon-Fri, 9:00 am - 5:00 pm
Closed: Sat., Sun., Pub. Hols., New Year Hols.
*Relocation inquiries counter now open.

Airport Information Corner
In North Area Consultation Center

Ibaraki Area Consultation Center
Address: 2nd Floor, former JA Inashiki-Nagasao Branch, 188 Nagasao, Kawachi, Inashiki County, Ibaraki Prefecture
Tel: 81-(0)297-84-5017/5018
Fax: 81-(0)297-84-5013
Business hours: Mon-Fri, 10:00 am - 4:00 pm
Closed: Sat., Sun., Pub. Hols., New Year Hols.

NAA Information Corner
Address: 1st Floor, NAA Bldg., Narita International Airport, Narita City, Chiba Prefecture
Tel: 81-(0)476-34-5058 (Public Relations Office)
Fax: 81-(0)476-34-5030 (Public Relations Office)
Business hours: Mon-Fri, 9:30 am - 5:00 pm
Closed: Sat., Sun., Pub. Hols., New Year Hols.

Area Consultation Office
Address: 1-2 Goryo Bokujo, Sanrizuka, Narita City, Chiba Prefecture
Tel: 81-(0)476-32-2352
Fax: 81-(0)476-32-9987
Business hours: Mon-Fri, 9:00 am - 5:00 pm
Closed: Sat., Sun., Pub. Hols., New Year Hols.

Airport Information Center
In the same building as the Area Consultation Office. Same address, contact numbers and business hours as the Area Consultation Office.

South Area Consultation Center
Address: 2nd Floor, Chiyoda Annex, Shibayama Central Community Center, 18-52 Osato, Shibayama, Sanbu County, Chiba Prefecture
Tel: 81-(0)479-78-1394
Fax: 81-(0)479-78-1398
Business hours: Mon-Fri, 9:00 am - 5:00 pm
Closed: Sat., Sun., Pub. Hols., New Year Hols.
*Relocation inquiries counter now open. (Please use other facilities for information releases.)

Museum of Aeronautical Sciences Eco-Airport Corner
Address: 111-3 Iwayama, Shibayama, Sanbu County, Chiba Prefecture
Tel: 81-(0)479-78-0557
Fax: 81-(0)479-78-0560
Business hours: 10:00 am - 5:00 pm
(No entry after 4:30 pm)
Closed: Every Monday (or following day if Monday is a public holiday)
Year end (29 - 31 Dec.)
* Open every day in January, May and August

Postscript

We offer our sincerest condolences to everyone who was affected by the Great East Japan Earthquake and subsequent nuclear accident in March 2011.

As we watched the large numbers of rescue equipment being unloaded immediately after the earthquake and sent to the Tohoku region, we were reminded of our airport's role in providing a solid link between Japan and the rest of the world. At the same time, it brought home to us once more the importance of our responsibilities in continuing to support Narita International Airport.

Compiling this Environment Report and winding up and reporting on the Eco-Airport Master Plan (Fiscal 2005-2010), which contains all of our efforts to date, is a new experience for all of us. Our emphasis has been on frankly reporting the progress of our programs and our future initiatives, etc. and, therefore, the contents may be a little more

rigid than in the past. However, we hope you will understand the circumstances.

In presenting this edition of the Environment Report, we would like to take this opportunity to thank the airport companies and organizations who supplied the information, as well as everybody who assisted with the articles, photographs, etc.

Finally, we sincerely hope that this publication provides the opportunity for a greater number of people, local residents and airport customers alike, to understand the environmental initiatives at Narita International Airport, and that it serves as a tool for open communication. With the benefit of your frank, honest comments and impressions, we will strive to continue improving the Environment Report.

Eco-Airport Development and Planning Office