DRAFT TECHNICAL BACKGROUNDER
Northern Ontario Multimodal Transportation Strategy

Municipal Airports

Appendices

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Ministry of Northern Development and Mines

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Appendix A:
Municipal Airport Survey Results

A Municipal Airports Survey Results

Surveys of municipal airport status, operations and finances across the Province were conducted in 2006 and 2011. For the NOMTS it was decided to update this survey for Northern Ontario municipal airports only, and this was carried out in the summer of 2015. The survey is a valuable resource because it provides insight into information that is not ordinarily readily available.

Although the survey was designed to be comparable in many respects to the previous surveys, variations were made to include new questions such as the impacts of increases in the provincial aviation fuel tax and the status of Customs and Immigration services and to somewhat simplify the questionnaire. The survey was designed so that it could be filled in electronically as a fillable PDF form and emailed or printed and filled in on hard copy. The questionnaire is included as Appendix B.

The 2015 survey saw 27 of 37 Northern Ontario municipal airports respond, which is one more airport than the 2011 province-wide research exercise. Exhibit A.1 shows the municipal airports, indicating survey participation by airport.

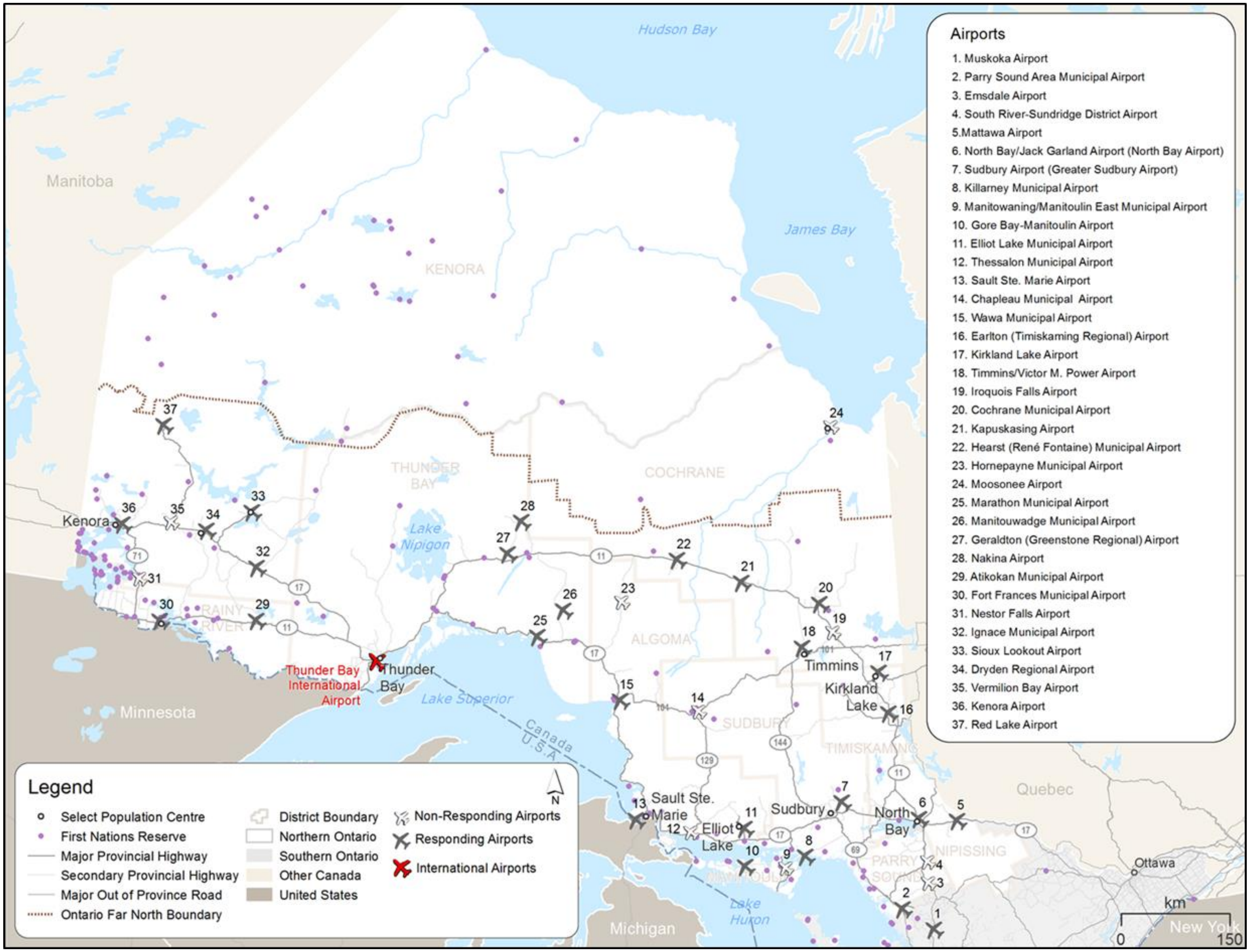
The participating airports were grouped into the same three categories used for analysis purposes:

- **Large Regional** (all 5 airports participated in the survey): served by at least three commercial airlines with scheduled service – Sault Ste. Marie, Sudbury, Timmins, North Bay, and Sioux Lookout;
- **Intermediate Regional** (6 of 8 airports participated): other municipal airports with scheduled commercial passenger flights – Fort Frances, Red Lake, Kapuskasing, Kenora, Dryden, and Nakina; and
- **Other Municipal** (16of 24 airports participated): all other municipal airports.

The survey was divided into four categories:

- Airport Information;
- Functions of Airport;
- Airport Finance; and
- Airport Infrastructure.

Exhibit A.1: Municipal Airports by Survey Participation



*Note: As a national airport, Thunder Bay International Airport was not included in the municipal airports survey

A.1 Airport Information

Certification Status, Ownership, and Governance

The airport information portion of the survey focused on whether the airport in question was Transport Canada certified[1] or registered, and the owner and operator of the airport. Certification implies conformation with more strict Transport Canada standards with extra costs, but is required for airports with scheduled passenger services. Registered airports on the other hand are held to less stringent standards with associated lower costs, but do not have scheduled passenger service.

Among the 27 participating airports:

- All 11 Large Regional and Intermediate Regional Airports are certified
- For Other Municipal Airports:
  - 38% (6) are certified
  - 63% (10) are registered

Regarding municipal airport ownership:

- 23 (85% of 27 participating) airports are owned and operated by the local municipality;
- 17 of the 23 are operated directly by the municipality – 6 are operated by local airport boards/commissions
- The other 4 (15%) participating airports use another model, including private contractors and not-for-profit corporations

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[1] Transport Canada (TP 13549 – Sharing the Skies):

Aerodromes in Canada must be certified when:

- *they are located within the built-up area of a city or town;*
- *they are used by an air carrier as a main operations base, or for scheduled passenger carrying service; or*
- *the Minister considers certification is in the public interest*

A.2 Functions of Airport

How Municipal Airport Serve Northern Ontario Communities

Overall, 6 of the 17 certified airports that responded to the survey do not currently provide scheduled passenger service. Trends suggest that loss of scheduled service and the associated cost of maintaining certification can lead to de-certification.

Responses to the survey indicate that municipal airports provide a variety of services, such as customs and immigration, private aircraft storage, and fueling services. Government or government-sponsored services (firefighting, air ambulance, medevac, search and rescue, and police) are handled at most participating airports and can make up a high proportion of airport activities.

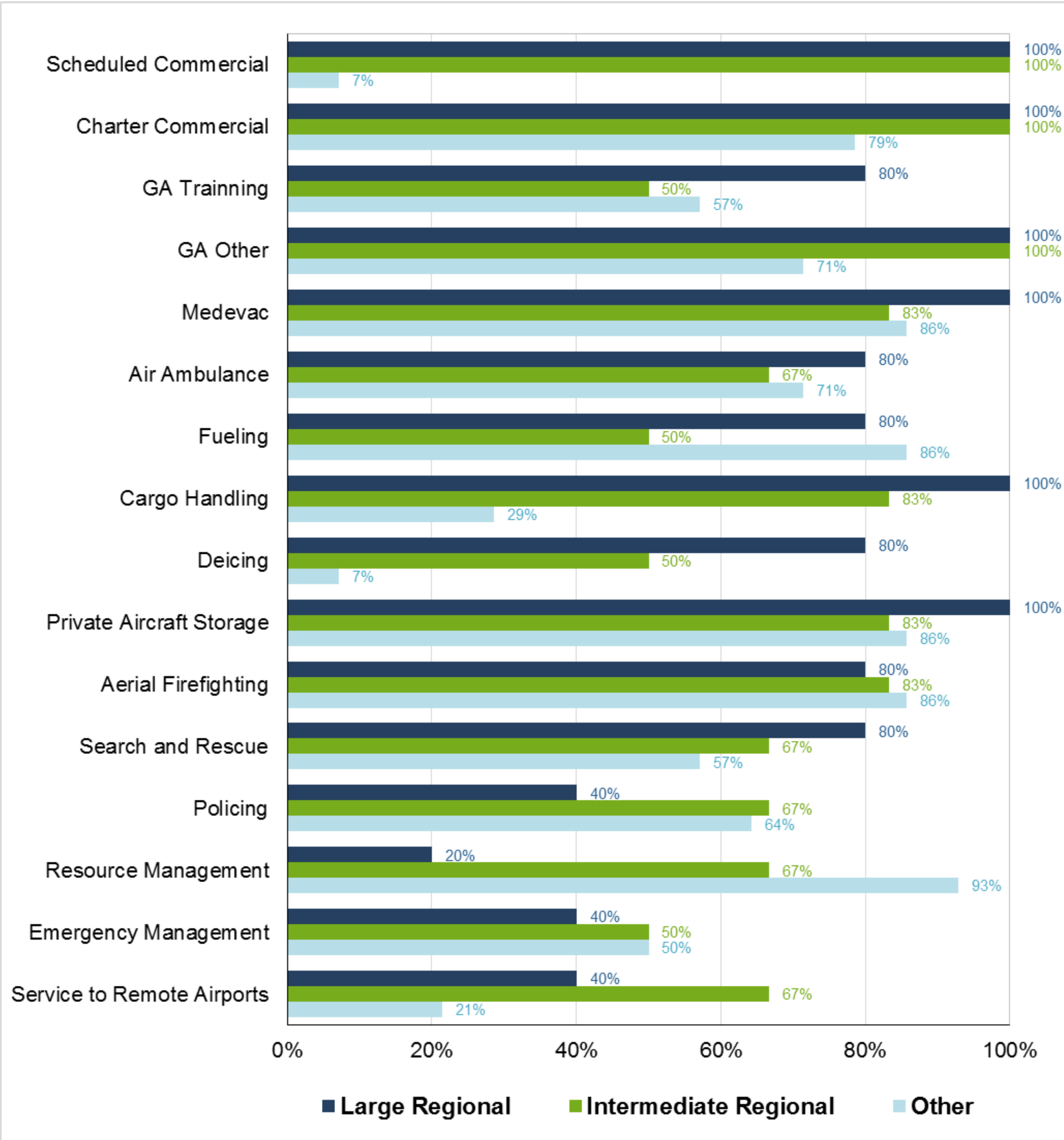
Exhibit A.2 shows the airport functions provided by the three groupings.

Key findings include the following:

- It would be difficult if not impossible to provide government services (aerial firefighting, policing, resource management etc.) in small communities without municipal airports;
- All Large Regional and Intermediate Regional airports have scheduled passenger service;
- All Large Regional airports have cargo handling service either provided by the airport or handled by the individual carrier;
- Intermediate Regional airports are more likely to provide service to remote airports; and

Resource Management is the most common function of Other Municipal airports.

Exhibit A.2: Airport Functions by Large Regional, Intermediate Regional, and Other Municipal



Top Destinations and Passenger Movements

Municipal Airports in Northern Ontario serve a variety of destinations:

- Toronto is one of the top 5 destinations served for all 5 Large Regional airports and Toronto is the number one destination served for 3 of the 5 Large Regional airports;
- For Intermediate Regional Airports, all but one list cities within Northern Ontario as their top destination (Red Lake is the exception, which cites Winnipeg as its top destination);
- Six Other Municipal airports list Toronto as one of the top 5 destinations served and five list Thunder Bay one of the top 5 destinations;
- Thunder Bay and Winnipeg are the most common destinations for Northwest airports.

Sault Ste. Marie, North Bay, Timmins, and Sudbury (all Large Regional airports) are all served by Porter Airlines and Air Canada and all have scheduled service to Toronto. Timmins is the only airport with service to Toronto that lists another community (Moosonee) as its top destination.

Intermediate Regional airports are served by Bearskin Airlines, Thunder Airlines, Wasaya Airways, and Nakina Air Services

Destinations include Winnipeg, other Northern Ontario cities, and Far North Communities.

Of note, 74% of the airports responding reported that it is difficult to obtain scheduled passenger service. The most commonly cited reasons are low population (i.e. small market) and/or close proximity to a larger airport with passenger service.

Passenger Movements

In terms of total passengers, as shown in Exhibit A.3 for 2014 and 2015, the busiest municipal airports in Northern Ontario are Sudbury and Timmins.

Exhibit A.3: Annual Air Passenger Traffic

Airport	2014	2015
Thunder Bay	739,028	732,136
Sudbury	232,880	229,010
Timmins	210,448	210,831

Source: CANSIM 4010-0044. Information for other airports is not available due to confidentiality requirements of the Statistics Act.

Accurate data is more difficult to obtain for airports with less traffic as it is supressed to meet confidentiality requirements of the Statistics Act.

Customs and Immigration Services

Customs and immigration services are important both for international commercial passenger traffic and for private general aviation traffic wishing to fly from the United States to Canada.

As **Exhibit A.4** shows, Large Regional airports have the largest share of on-site customs and immigration services.

Exhibit A.4: Airport Customs Facilities (Current and Former)

Municipal Airport Type	Provided On-Site	Not Provided (but Previously Provided)	Not Provided (Also NOT Previously Provided)	Canpass Only
Large Regional	3 (60%)	2 (40%)	0	0
Intermediate Regional	2 (33%)	2 (33%)	2 (33%)	0
Other Municipal	2 (13%)	0	13 (81%)	1 (6%)
Total	7 (26%)	4 (15%)	15 (56%)	1 (6%)

CANPASS – for private aircraft carrying no more than 15 people (including crew) and travelling to Canada from the United States; provides expedited clearance for low-risk, pre-screened travellers. The results show a decline in the provision of Customs and Immigration services.

Self-Reported Benefits of Municipal Airports

To get a better understanding of how municipal airports benefit surrounding communities, airport operators were asked to report on ways in which the airport supports the community.

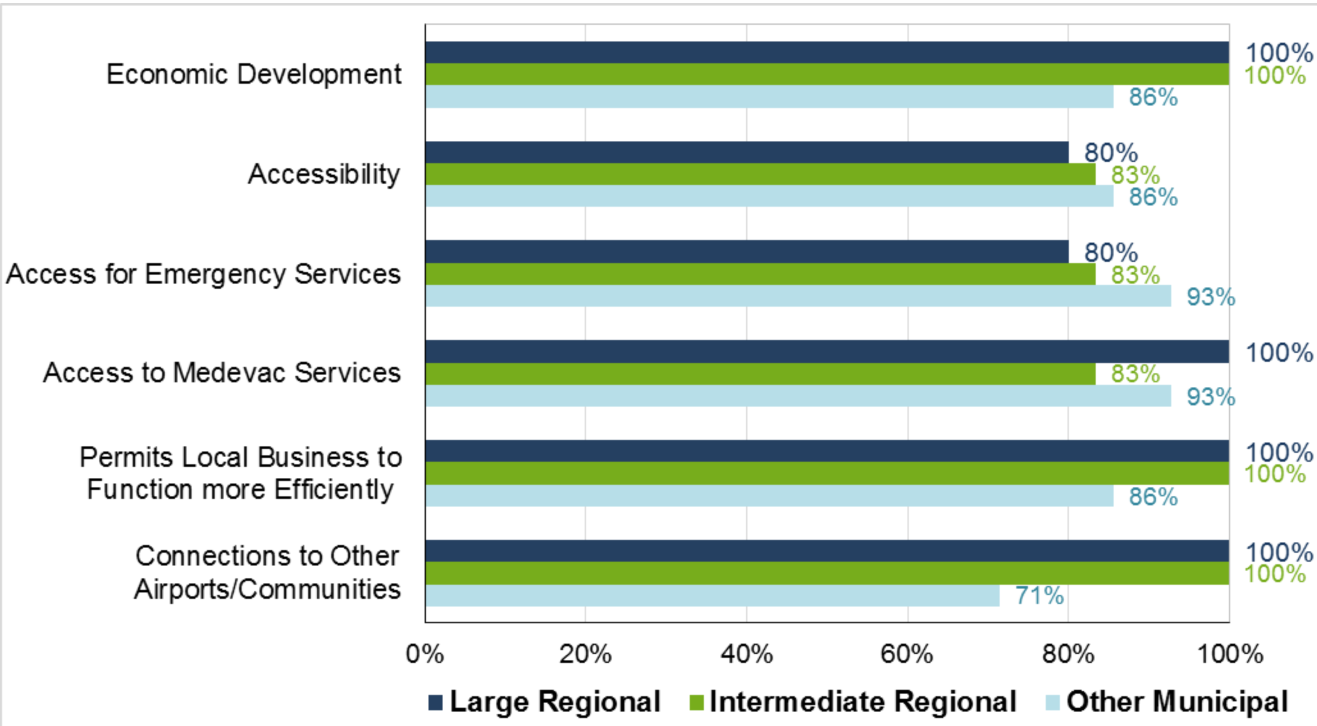
The results in Exhibit A.5 show that Large Regional and Intermediate Regional Airports tend to cite more benefits than their Other Municipal counterparts overall. The one exception is the category of access to emergency services, which is cited by all Other Regional airports as a benefit.

Large Municipal airports all cite economic development, the fact that the airport allows local business to function more efficiently, access for medevac services, and connections to other airports as benefits.

All intermediate airports cite the same benefits as Large Municipal airports with the exception of access for medevac services, which is cited by 83% of airports in this category.

There is no category for which 100% of Other Municipal airports cite benefits.

Exhibit A.5: Self-Reported Community Benefits of a Municipal Airports



A.3 Airport Finance

Financial Liability

Airport survey participants were asked to report on the financial viability of their airport by selecting one of three categories:

- **Viable:** sufficient revenues to cover operating costs and airport's share of capital costs;
- **Self-Sustaining:** sufficient revenues to cover operating costs; or
- **Not Self-Sustaining:** insufficient cash flow to cover operating costs.

Exhibit A.6 outlines the responses by airport grouping.

Exhibit A.6: Self-Reported Financial Viability

Municipal Airport Type	Viable	Self-Sustaining	Not Self-Sustaining	Report Operating Profit
Large Regional	1 (20%)	4 (80%)	0%	5 (100%)
Intermediate Regional	0%	1 (17%)	5 (83%)	2 (40%)
Other Municipal	0%	2 (12%)	14 (88%)	2 (13%)

A total of 13 airports reported a change in financial viability in the last 4 years: 6 improved, 5 declined, 2 are unknown. As in 2015, only one airport reported as viable in 2011.

Of the 6 airports reporting improved financial viability, 2 are Large Regional, one is Intermediate Regional, and the remaining 3 are Other Municipal. Of the 5 reporting a decline, 1 is an Intermediate Regional airport, and the remainder are Other Municipal.

Changes in financial viability are linked to increasing or decreasing revenues, usually linked by participants to the acquisition or loss of scheduled passenger service.

Of the participating airports, 9 reported operating profit. Of the 9:

- 1 reports as Viable
- 6 report as Self-Sustaining
- 2 report as Not Self-Sustaining

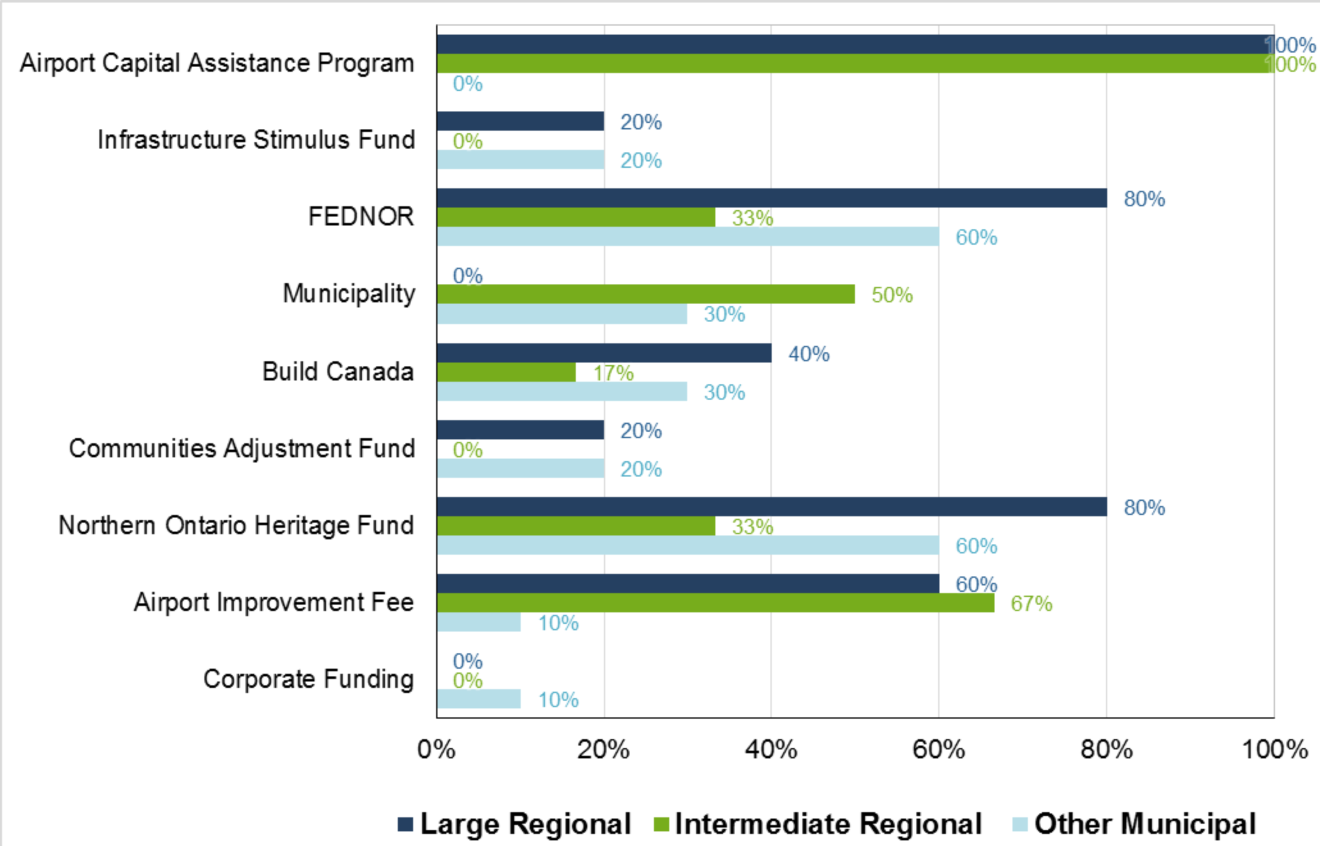
Funding Sources

Municipal airports are eligible for a variety of funding sources depending on the types of services offered at the airport.

Exhibit A.7 shows that a higher percentage of Large Regional and Intermediate Regional airports report funding from the nine identified sources than are reported by Other Municipalities and they also report drawing on a greater variety of those sources.

Of note, all airports in the Large Regional and Intermediate Regional category report funding from the Airport Capital Assistance Program (ACAP). This makes sense as those airports all have scheduled commercial service and only airports with scheduled passenger service are eligible for the ACAP.

Exhibit A.7: Funding Sources by Municipal Airport Type



FedNor and the Northern Ontario Heritage Fund are the second most frequently cited funding sources, although they are reported as being less frequently used by Intermediate Regional airports than by airports in the other two categories. It appears that in many instances these funding sources fund the same projects, with the FedNor funding making up the federal government's contribution and the Northern Ontario Heritage Fund making up the Province's contribution.

While exact comparisons with 2011 results are difficult, as the 2011 survey included all municipal airports in Ontario, it is clear that ACAP was a significant source of funding for eligible airports in that year also.

Airport Employment

Municipal airports in Northern Ontario have a large range of employee numbers. Despite having the lowest number of airports (5), the Large Regional Airports have the largest number of employees, as Exhibit A.8 demonstrates. Overall, airports with scheduled commercial passenger service have the highest employee numbers. Total employment at the responding airports was over 2400 persons.

- Airports in all categories have a small number of temporary full-time employees
- Airports with over 100 employees are all certified

Exhibit A.8: Number of Employees by Municipal Airport Classification

Airport Classification	Total Employees*	Total by Type (where provided)		
		Permanent Full-Time	Temporary Full-Time	Part-Time
Large Regional	1469	1133 (77%)	38 (2.6%)	296 (20%)
Intermediate Regional	525	116 (91%)	2 (1.6%)	10 (7.8%)
Other Municipal	343.5	172.5 (50%)	35 (10%)	139 (40%)

*Total Employee figure is not the sum of the Total by Type – Total by Type, as the breakdown is not always provided.

Airport Fuel Sales

Participants were asked: "is aviation/jet fuel sold at the airport?" – 26 of 27 reported "yes"; 69% of airports with fuel sales sell it themselves or have the municipality as the seller. At the other airports private companies sell fuel.

There is a large range in the amount of fuel sold at participating airports. Reported fuel sales per airport ranged from 7,000,000 Litres of jet fuel to as little as 4,000 Litres. Logically, busier airports sell more fuel. All Large Regional airports that provided a figure reported selling over 2,000,000 Litres of fuel. No Other Municipal airport reported selling over 450,000 Litres. However, one must be cautious when interpreting these numbers. They are self-reported and in many cases are an operator's best estimate. In addition, several airports reported that fuel is sold by a third party private operator and as a result numbers are not known.

Participating airports provided mixed responses on the impact of changes in fuel prices, with half of the airports that offered comments stating that changes in fuel prices impact the operations of their airport; the other half offering comments stated that changes in fuel prices do not impact the airport:

- Some reported that their fuel prices are comparable with other area airports – therefore changes impact all airports in the area;
- Others report that aircraft will fuel at airports with less expensive fuel.
- Of the 10 airports reporting sensitivity to price changes, 6 are located near provincial or international borders – 2 of the 6 are located close to the United States. However, there are other airports located close to provincial or international borders that did not report sensitivity to changes in fuel prices.

Long-Term Airport Planning

Airport operators were asked if their airports had Airport Master Plans and Business Development Plans. The responses are outlined in Exhibit A.9. Overall, Airport Master Plans are more common than Business Development Plans.

Exhibit A.9: Long Term Airport Plans by Municipal Airport Type

Long-Term Plan	Large Regional	Intermediate Regional	Other Municipal
Airport Master Plan	60%	67%	44%
Business Development Plans	60%	50%	31%

The year that the Airport Master Plans were updated varies considerably by airport. In contrast, Business Development Plans were mostly updated and/or created post 2010.

Unlike many other categories in the survey where Large Regional Airports were the leaders, a slightly higher percentage of Intermediate Regional airports reported having Airport Improvement Plans.

Participants were asked to outline their airport's Risk Management and Emergency Preparedness protocols. The responses are displayed in Exhibit A.10.

Exhibit A.10: Emergency Protocol, Planning, and Dangerous Goods Handling by Municipal Airport Type

Emergency Preparedness	Large Regional	Intermediate Regional	Other Municipal
Have an emergency management program	80%	100%	56%
Completed hazardous identification and risk assessment in past five years	40%	50%	19%
Have dangerous goods moving through the airport	60%	50%	6%
Management system for the storage and handling of dangerous goods/hazardous materials	60%	50%	50%
Engage in annual/regular emergency evacuations	60%	67%	31%
Faced an emergency resulting from natural causes	20%	33%	6%

There are several noteworthy points from the above table:

- Most Large Regional and all Intermediate Regional Airports have an emergency management program in place;
- Very few Other Municipal Airports have dangerous goods moving through the airport; and
- Reported emergencies resulting from natural causes include lightning strikes, acting as a base for fighting forest fires, and acting as a base for evacuating Far North communities as a result of flooding and/or forest fires.

A.4 Airport Infrastructure: The Physical Condition of Northern Ontario's Municipal Airports

Reporting on the condition of airport infrastructure was a substantial part of the airport survey. Participants were asked to rank the infrastructure at their respective airports as "Very Poor," "Poor," "Fair," "Good," or "Excellent."

The results are summarized in Exhibit A.11, Exhibit A.12Exhibit A.13 for the three airport categorizations, respectively.

Exhibit A.11: Condition of Airport Infrastructure at Large Regional Airports

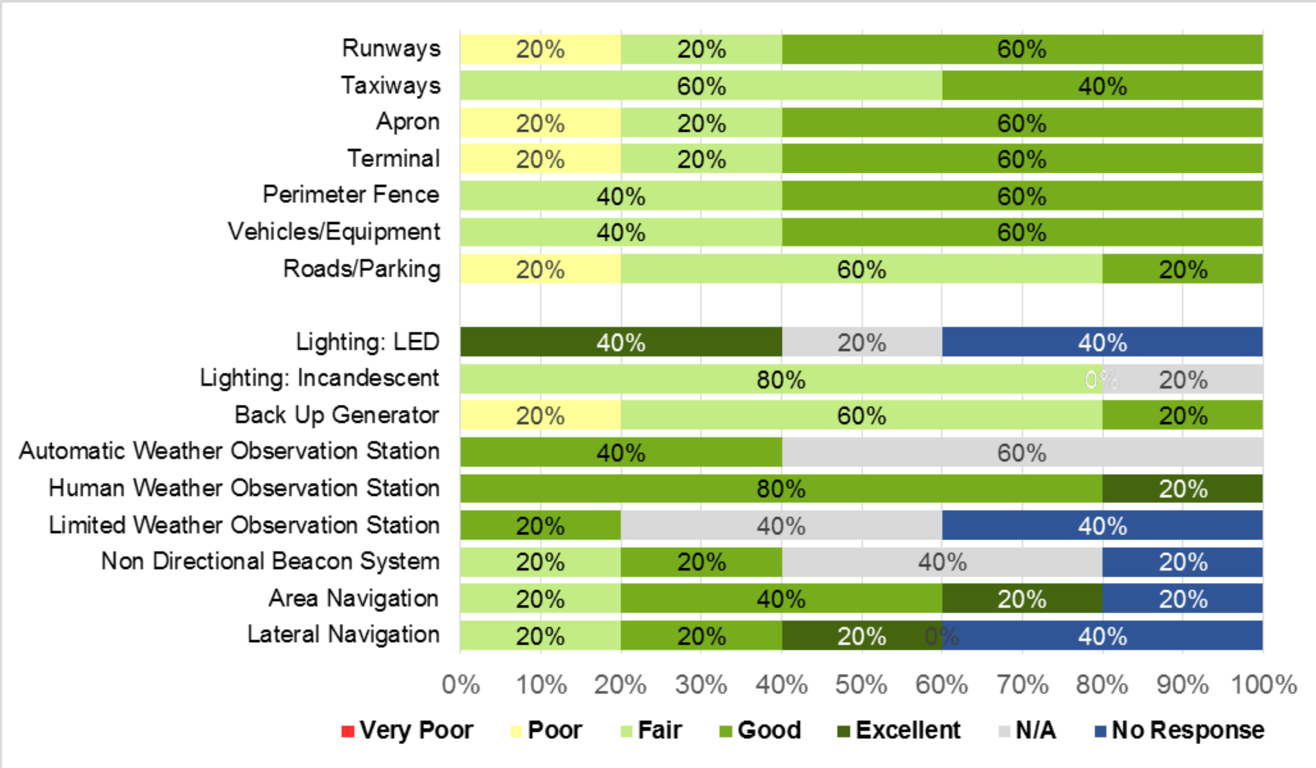


Exhibit A.12: Condition of Airport Infrastructure at Intermediate Regional Airports

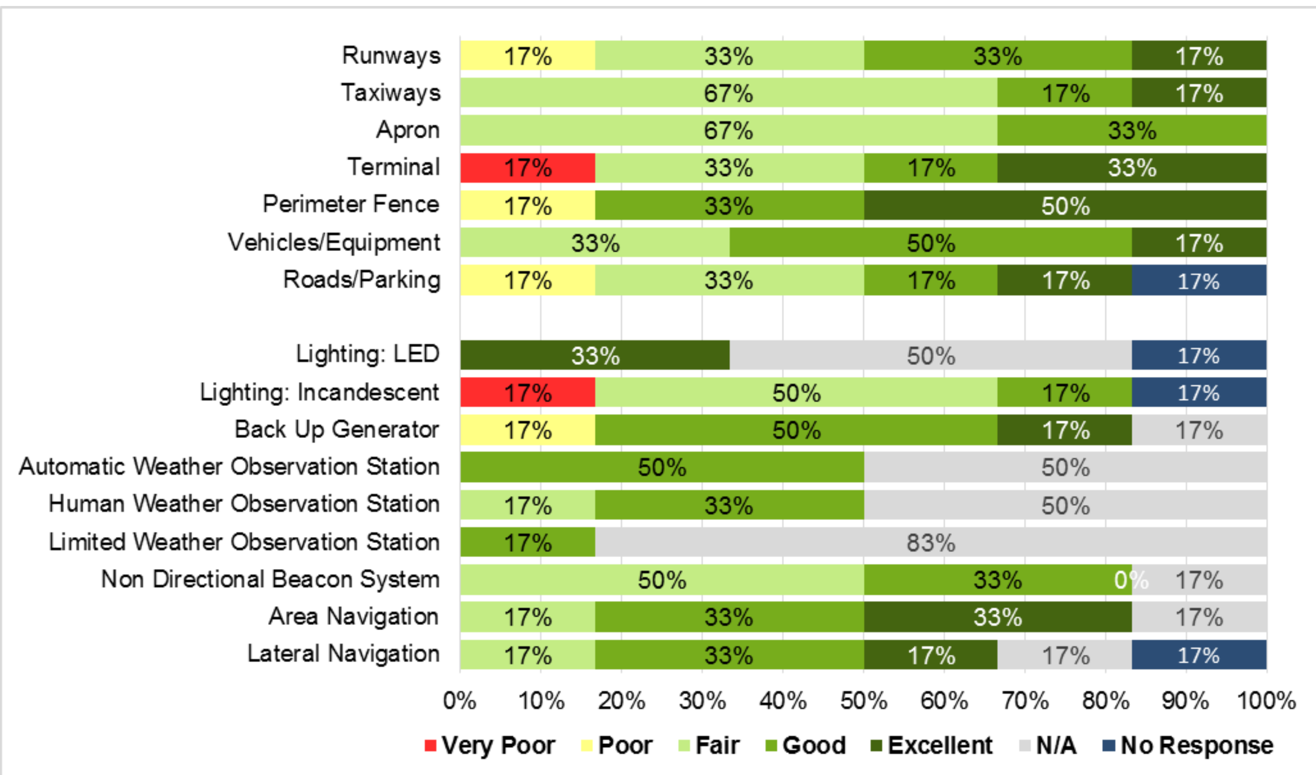
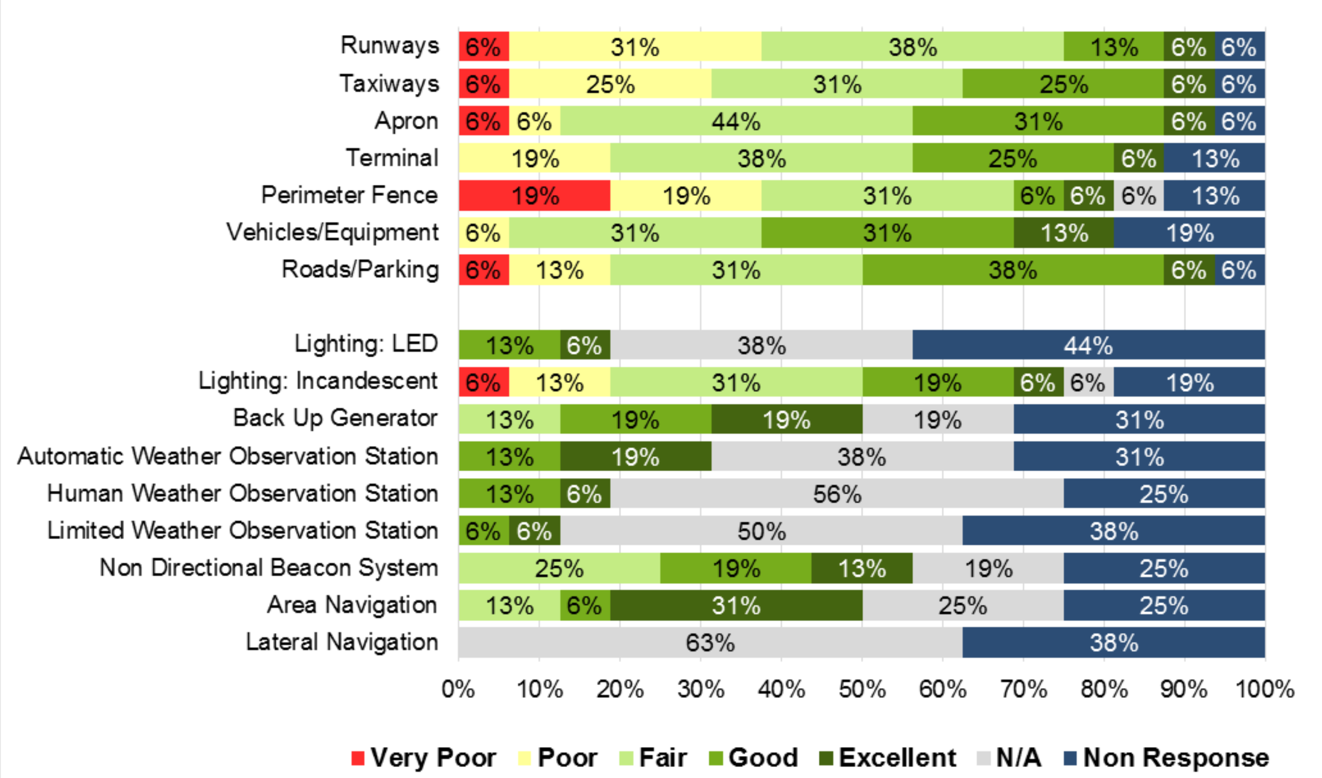


Exhibit A.13: Condition of Airport Infrastructure at Other Municipal Airports



These responses can be summarized as follows:

- Most infrastructure was reported as “Fair” or “Good” in all airport groups;
- Large Regional Airports did not report any infrastructure in the “Very Poor” category;
- Runways are cited as the most frequent infrastructure need;
- Taxiways and aprons are also common infrastructure needs;
- The majority of participating airports do not have Lateral Navigation Systems, Weather Observation Systems, and LED Lighting.
- In 2011, most airport infrastructure was also reported as “Fair” or “Good”
- With the exception of Vehicles/Equipment and Roads/Parking, more airports reported infrastructure in the “Fair” or “Good” category than in 2011[2]
- For runways, the percentage of airports reporting “Excellent” decreased from 15% to 7%. However, 8% of airports reported their runways as “Very Poor” in 2011, whereas no airport listed a runway as “Very Poor” in 2015

[2] The 2011 survey did not ask participants to rate lighting, other navigation equipment, and weather observation equipment, as was the case in the 2015 survey.

- For taxiways, fewer airports report “Poor” in 2015 (19% in 2011 and 15% in 2015) and there were fewer reporting as “Excellent” in 2015 (15% in 2011 versus 7% in 2015). However, in 2015 “Fair” and “Good” were reported by 44% and 26% of airports respectively, whereas in 2011 the numbers were at 38% and 23 % for “Fair” and “Good” ratings

It appears that municipal airports are more than holding their own in maintaining their infrastructure over the period from 2011 to 2015.

A.5 Role and Function of the Air Mode

Because of the long distances and the scarcity of surface alternatives the air mode provides an important means of access and connectivity needed by northern communities and northern industries. It is reasonable to say that air services are essential to meet these needs. In the case of municipal airports, local authorities have recognized this and have been prepared to support the development and operation of airports. As activity increases more and better air services will be required.

Despite the fact that many municipal airports in Northern Ontario are not financially self-sustaining and do not have scheduled passenger service, they still act as bases for valuable services including, search and rescue, policing, resource management, medevac, air ambulance, and emergency management. These services are spread across multiple airport categories.

For aerial firefighting services, municipal airport survey responses indicate that 86% of Other Municipal airports host water bombing services, comparable to the 83% of Intermediate Regional airports and 80% of Large Regional airports. For resource management, Other Municipal airports lead the way with 93% reporting that they act as a base for resource management services, compared to 67 percent of Intermediate Regional and only 20 percent of Large Regional.

Essential medical services are also supported at airports both large and small all over Northern Ontario. Medevac flights are served at 86% of Other Municipal airports, 83% of Intermediate Regional airports, and 100% of Large Regional airports. The police also make use of municipal airports in Northern Ontario with 64% of survey participants in the Other Municipal category reporting that their airports act as bases for police activity. This compares to 67% in the Intermediate category and 40% in the Large Regional category.

For the movement of people, scheduled passenger services do not tell the entire story. While all Large and Intermediate airports provide scheduled commercial service, as well as charter services, 79% of Other Regional airports have charter services. Charter services provide valuable links to other communities. Exhibit A.14 outlines the services provided at each airport. Not all airports provide every service, but they all provide some valuable services. If airports close, the communities they serve stand to lose important resources if there is not a suitable alternative.

A.6 Additional Comments from Airport Operators

The final question of the survey asked participants if they had any additional comments. The common themes from the additional comments are highlighted below:

- Higher fees and taxation in Canada compared to the United States – especially for airports near the US border;
- Municipal airports are assets, but it is often difficult to generate the revenue to take full advantage of them and invest in infrastructure upgrades;
- Fortunes of airports are sometimes linked to natural resource development; and
- Desire for a policy and funding model designed to support small airports.

Exhibit A.14: Aviation Services by Airport Type (Survey Participants Only)

Airport	Scheduled Passenger	Charter	General Aviation	Medical	Cargo	Search and Rescue	Aerial Fire	Resource Management	Policing
Large Regional									
Greater Sudbury Airport	✓	✓	✓	✓	✓	✓	✓	✓	✓
North Bay Jack Garland Airport	✓	✓	✓	✓	✓	✓	✓	✓	
Sault Ste. Marie Airport	✓	✓	✓	✓	✓	✓	✓	✓	
Sioux Lookout Municipal Airport	✓	✓	✓	✓	✓				✓
Timmins Victor M. Power Airport	✓	✓	✓	✓	✓	✓	✓	✓	
Intermediate Regional									
Dryden Regional Airport	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fort Frances Municipal Airport	✓	✓	✓	✓	✓	✓	✓	✓	✓
Kapuskasing Airport	✓	✓	✓	✓			✓		
Kenora Airport	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nakina Airport	✓	✓	✓	✓	✓				
Red Lake Airport	✓	✓	✓	✓	✓	✓	✓	✓	✓
Other Municipal									
Atikokan Municipal Airport			✓	✓			✓	✓	
Cochrane Municipal Airport		✓	✓	✓	✓	✓	✓	✓	✓
Earlton-Timiskaming Regional Airport		✓	✓	✓	✓	✓		✓	✓
Elliot Lake Airport		✓	✓	✓	✓	✓	✓	✓	✓
Geraldton (Greenstone) Regional Airport		✓		✓			✓	✓	
Gore Bay - Manitoulin Airport		✓	✓	✓			✓	✓	✓
Hearst (Rene Fontaine) Airport		✓	✓	✓			✓	✓	
Kirkland Lake Municipal Airport		✓	✓	✓			✓	✓	
Manitouwadge Municipal Airport				✓			✓	✓	
Marathon Municipal Airport		✓	✓	✓		✓	✓	✓	✓
Mattawa Airport			✓	✓					✓
Muskoka Airport		✓	✓	✓	✓	✓	✓	✓	✓
Parry Sound Area Municipal Airport		✓	✓	✓		✓	✓	✓	✓
Wawa Municipal Airport		✓	✓	✓		✓	✓	✓	✓