



TOPIC

Analyse the rationale behind and purpose of airport masterplans and comment on their validity

ESSENTIAL CONTENT

- The co-ordination of airport development and planning with regional development plans
- The importance of air traffic demand forecasting to provide airport infrastructure in time to meet demand
- Government policy relating to airport masterplans

AIRPORT MASTERPLANS; PRODUCTS

THE PRODUCTS OF THE MASTER PLANNING PROCESS WILL VARY WITH THE COMPLEXITY OF THE EFFORT. MASTER PLANS CAN INCLUDE THE FOLLOWING DELIVERABLES:

- A TECHNICAL REPORT- CONTAINS THE RESULTS OF THE ANALYSES CONDUCTED DURING THE DEVELOPMENT OF THE MASTER PLAN. FOR COMPLEX STUDIES, INTERIM REPORTS MAY BE PRODUCED TO FACILITATE COORDINATION WITH VARIOUS GOVERNMENT AGENCIES, TENANTS, USERS, THE GENERAL PUBLIC, AND OTHER INTERESTED PARTIES.

(FAA, 2015)

AIRPORT MASTERPLANS; PRODUCTS

THE PRODUCTS OF THE MASTER PLANNING PROCESS WILL VARY WITH THE COMPLEXITY OF THE EFFORT. MASTER PLANS CAN INCLUDE THE FOLLOWING DELIVERABLES:

- A SUMMARY REPORT- THIS IS USEFUL IN BRINGING TOGETHER PERTINENT FACTS, CONCLUSIONS AND RECOMMENDATIONS FOR PUBLIC REVIEW.

(FAA, 2015)

AIRPORT MASTERPLANS; PRODUCTS

THE PRODUCTS OF THE MASTER PLANNING PROCESS WILL VARY WITH THE COMPLEXITY OF THE EFFORT. MASTER PLANS CAN INCLUDE THE FOLLOWING DELIVERABLES:

- AN AIRPORT LAYOUT PLAN DRAWING SET- THIS CONTAINS A GRAPHICAL REPRESENTATION OF THE PROPOSED DEVELOPMENT IN THE MASTER PLAN AND IS TYPICALLY PRODUCED AS A SEPARATE SET OF FULL-SIZED DRAWINGS.

(FAA, 2015)

AIRPORT MASTERPLANS; PRODUCTS

THE PRODUCTS OF THE MASTER PLANNING PROCESS WILL VARY WITH THE COMPLEXITY OF THE EFFORT. MASTER PLANS CAN INCLUDE THE FOLLOWING DELIVERABLES:

- A WEB PAGE – MANY AIRPORT SPONSORS MAINTAIN A PUBLIC ACCESS WEB PAGE WITH GENERAL INFORMATION ABOUT THE GOVERNMENTAL UNIT INVOLVED AND SPECIFIC INFORMATION REGARDING THE AIRPORT OR AIRPORTS OPERATED BY THE SPONSOR.

(FAA, 2015)

AIRPORT MASTERPLANS; PRODUCTS

THE PRODUCTS OF THE MASTER PLANNING PROCESS WILL VARY WITH THE COMPLEXITY OF THE EFFORT. MASTER PLANS CAN INCLUDE THE FOLLOWING DELIVERABLES:

- PUBLIC INFORMATION KIT – THROUGHOUT THE MASTER PLAN STUDY, AIRPORT SPONSOR REPRESENTATIVES MAY BE ASKED TO SPEAK TO COMMUNITY ASSOCIATIONS, CIVIC CLUBS, AND OTHER ORGANIZATIONS WITH AN ACTIVE INTEREST IN THE AIRPORT.

(FAA, 2015)

GOVERNMENT POLICY RELATING TO AIRPORT MASTERPLANS


THE FAA REVIEWS ALL ELEMENTS OF THE MASTER PLAN TO ENSURE THAT SOUND PLANNING TECHNIQUES HAVE BEEN APPLIED. HOWEVER, THE FAA ONLY APPROVES THE FOLLOWING ELEMENTS OF AIRPORT MASTER PLANS:

- FORECASTS OF DEMAND
- AIRPORT LAYOUT PLAN

(FAA, 2015)

AIRPORT MASTERPLANS; ELEMENTS

- PRE-PLANNING
- PUBLIC INVOLVEMENT
- ENVIRONMENTAL CONSIDERATIONS
- EXISTING CONDITIONS
- AVIATION FORECASTS
- FACILITY REQUIREMENTS
- ALTERNATIVES DEVELOPMENT AND EVALUATION
- AIRPORT LAYOUT PLAN
- FACILITIES IMPLEMENTATION PLAN
- FINANCIAL FEASIBILITY ANALYSIS



► Terminal 1 Expansion

Two-Runway System

These include expanding Terminal 1

GOVERNMENT POLICY RELATING TO AIRPORT MASTERPLANS

AIRPORT PLANNING SHOULD CONSIDER BOTH THE PRESENT AND POTENTIAL AVIATION NEEDS AND DEMAND ASSOCIATED WITH THE AIRPORT.

CONSIDER PLANNING FOR RUNWAYS AND TAXIWAYS LOCATIONS THAT WILL MEET FUTURE SEPARATION REQUIREMENTS EVEN IF THE WIDTH, STRENGTH, AND LENGTH MUST INCREASE LATER.

SUCH DECISIONS SHOULD BE SUPPORTED BY APPROPRIATE PLANNING AND SHOULD BE SHOWN ON THE APPROVED ALP.

(FAA, 2015)

GOVERNMENT POLICY RELATING TO AIRPORT MASTERPLANS

THE UK GOVERNMENT ALSO RECOMMENDS THAT AIRPORT OPERATORS CONSULT ON PROPOSED CHANGES TO MASTER PLANS, AND ENGAGE MORE WIDELY WITH LOCAL COMMUNITIES PRIOR TO PUBLICATION, FOR EXAMPLE LIAISING MORE CLOSELY WITH LOCAL AUTHORITIES AND THROUGH DROP-IN SESSIONS AND PUBLIC MEETINGS.

AIRPORT OPERATORS SHOULD NOTIFY THE DFT OR DEVOLVED ADMINISTRATION WHEN PLANS ARE REVISED AND HIGHLIGHT ANY MATERIAL CHANGES.

AIRPORT OPERATORS ARE ALSO ENCOURAGED TO ADVERTISE THE PUBLICATION OF ANY REVISIONS TO THEIR PLANS WIDELY IN THEIR LOCAL AREA.

(DEPARTMENT FOR TRANSPORT, 2013)

GOVERNMENT POLICY RELATING TO AIRPORT MASTERPLANS

RESEARCH CARRIED OUT BY THE DfT ON THE EFFECTIVENESS OF MASTER PLANS HAS INDICATED THAT DRAFTING FOR ALL AUDIENCES PRODUCES A TENSION BETWEEN COMMUNICATING FUTURE PLANS AND PROVIDING A TECHNICAL REFERENCE SOURCE.

THE UK GOVERNMENT THEREFORE RECOMMENDS THAT, WHERE POSSIBLE, THE BODY OF THE DOCUMENT SHOULD BE ACCESSIBLE TO A LAY PERSON, AND THE TECHNICAL DETAIL CLEARLY ANNEXED.

(DEPARTMENT FOR TRANSPORT, 2013)

GOVERNMENT POLICY RELATING TO AIRPORT MASTERPLANS

THE UK GOVERNMENT RECOMMENDS THAT THE MORE GROUND COVERED IN A MASTER PLAN AND THE MORE EXTENSIVE THE CONSULTATION WHICH HAS INFORMED ITS PREPARATION, THE GREATER ITS VALUE IN INFORMING FUTURE LAND USE, TRANSPORT AND ECONOMIC PLANNING PROCESSES, AND IN SUPPORTING PROSPECTIVE PLANNING APPLICATIONS.

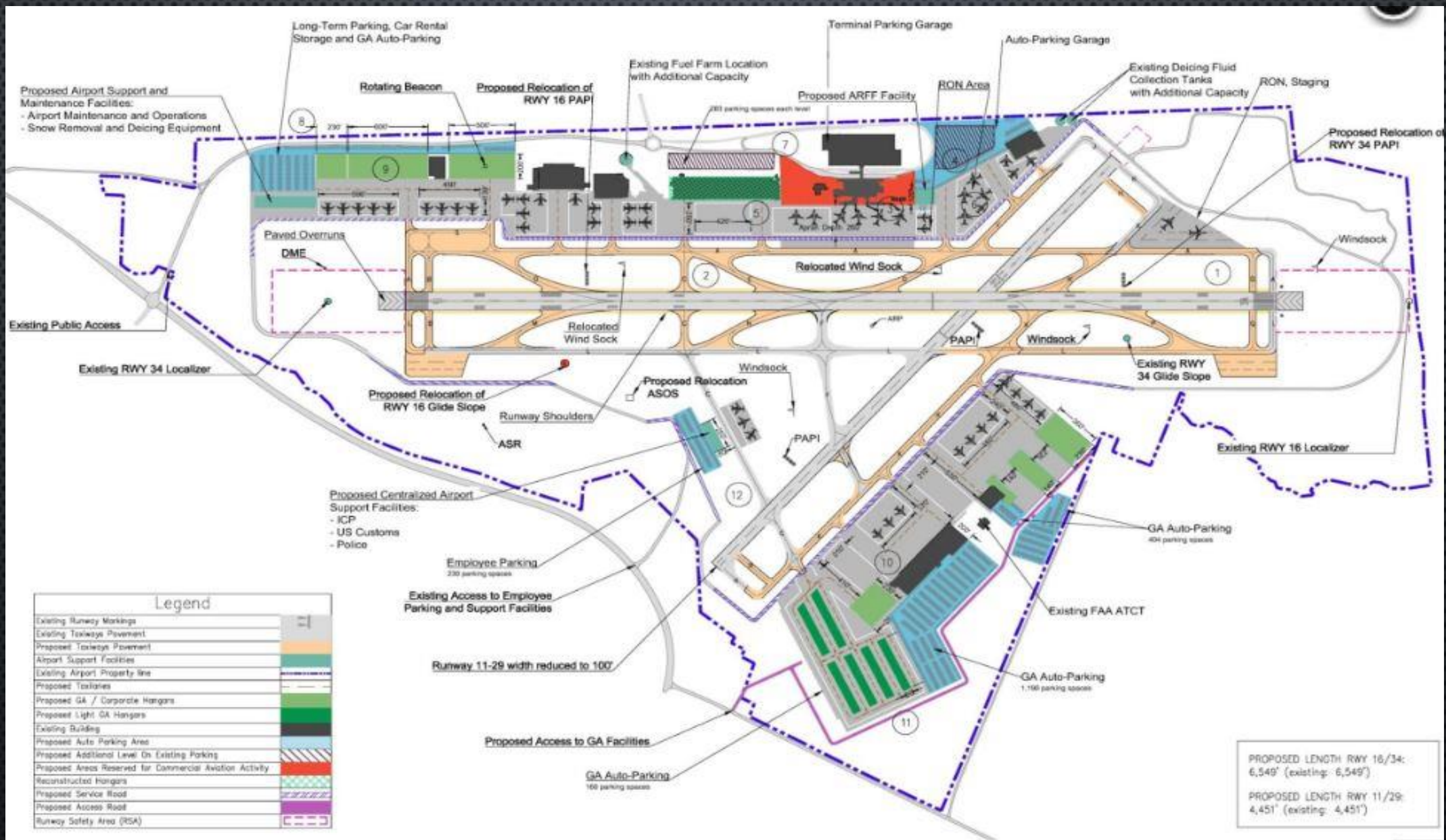
(DEPARTMENT FOR TRANSPORT, 2013)

GOVERNMENT POLICY RELATING TO AIRPORT MASTERPLANS

IN THE CASE OF MOST AIRPORTS, MASTER PLANS WILL ADDRESS THE FOLLOWING 'CORE' AREAS:

- FORECASTS
- INFRASTRUCTURE PROPOSALS
- SAFEGUARDING AND LAND/PROPERTY TAKE
- IMPACT ON PEOPLE AND THE NATURAL ENVIRONMENT
- PROPOSALS TO MINIMISE AND MITIGATE IMPACTS.

(DEPARTMENT FOR TRANSPORT, 2013)



AVIATION DEMAND FORECASTING

IN ORDER FOR THERE TO BE A RECOMMENDATION ON THE CAPACITY AND CONNECTIVITY THAT THE UK WILL NEED TO MAINTAIN ITS STATUS AS A LEADING GLOBAL AVIATION HUB, THERE NEEDS TO BE AN ASSESSMENT OF FUTURE DEMAND FOR AIR TRAVEL.

(AIRPORTS COMMISSION, 2013)

AVIATION DEMAND FORECASTING

FORECASTING METHODOLOGIES THAT USE HISTORICAL TRENDS AND DRAW UPON EVIDENCE AS TO HOW AND WHY THESE HAVE CHANGED OVER TIME, CAN PROVIDE A USEFUL TOOL FOR PROJECTING HOW THEY MAY DEVELOP IN FUTURE.

(AIRPORTS COMMISSION, 2013)



EXAMPLE

If past experience shows a link between factors such as population growth and Gross Domestic Product (GDP) increases and rising demand for electricity, and if the strength of those relationships can be measured, then the power industry can use that information to make an estimate of whether demand growth is expected to continue in future.

AVIATION DEMAND FORECASTING; PURPOSE

FORECASTS ARE DERIVED IN A RANGE OF WAYS DEPENDING ON BOTH THE TIME AND DATA AVAILABLE AND ALSO ON THE QUESTIONS THE FORECASTS ARE TRYING TO ADDRESS. METHODS OF FORECASTING VARY FROM:

- SIMPLE 'NAÏVE' FORECASTS
- MORE COMPLEX 'CAUSAL' FORECASTS
- JUDGEMENT BASED FORECASTING.

(AIRPORTS COMMISSION, 2013)

AVIATION DEMAND FORECASTING; PURPOSE

THE AVIATION INDUSTRY USES FORECASTING BOTH TO ENABLE SHORT TERM DECISIONS SUCH AS WHETHER TO EXPECT ADVERSE WEATHER CONDITIONS AND HOW TO RESPOND, AND TO SUPPORT LONGER TERM DECISIONS IN RESPECT OF FUTURE PATTERNS IN DEMAND FOR AIR TRAVEL.

THE USE AND SCOPE OF AVIATION FORECASTS CAN VARY.

(AIRPORTS COMMISSION, 2013)



EXAMPLE

Airlines use demand forecasting as a way of optimising the use of their planes by taking into account seasonal demand, whereas aircraft manufacturers have used forecasting to identify demand for more fuel efficient aircraft, in response to rising fuel prices, or for larger aircraft to serve the most popular routes more efficiently.

FURTHER READING

CITIZENS FOR A RESPONSIBLE COUNTY AIRPORT. (2019). *MASTER PLAN - CITIZENS FOR A RESPONSIBLE COUNTY AIRPORT*. [ONLINE] AVAILABLE AT: [HTTP://CRCAIRPORT.ORG/MASTER-PLAN/](http://CRCAIRPORT.ORG/MASTER-PLAN/) [ACCESSED 6 MAR. 2020].

REFERENCE

- AIRPORTS COMMISSION, 2013. *DISCUSSION PAPER 01: AVIATION DEMAND FORECASTING*. LONDON: CROWN, PP.6-8.
- DEPARTMENT FOR TRANSPORT, 2013. *AVIATION POLICY FRAMEWORK*. NORWICH: THE STATIONERY OFFICE, PP.69-70, 80-81.
- FEDERAL AVIATION ADMINISTRATION, 2015. *ADVISORY CIRCULAR*. WASHINGTON: U.S. DEPARTMENT OF TRANSPORTATION, PP.1-8.
- HKAIRPORTOFFICIAL, 2011. *HONG KONG INTERNATIONAL AIRPORT MASTER PLAN 2030*. [VIDEO] AVAILABLE AT: <[HTTPS://WWW.YOUTUBE.COM/WATCH?V=QYLM5KPTZ5C](https://www.youtube.com/watch?v=QYLM5KPTZ5C)> [ACCESSED 7 MARCH 2020].