THE REPUBLIC OF IRELAND

AAM MARKET ASSESSMENT REPORT

EA Maven

FUTURE MOBILITY
CAMPUS IRELAND

ELECTRIC AVIATION MAVEN TEAM

Darrell Swanson Director | Co-Founder

- 25 years' experience in airport master planning, design, acquisition due diligence
- Electric aviation thought leader with reference to the evolution of Distributed Aviation as enabled by electric propulsion systems
- Development of country wide demand modelling for electric aircraft operators
- NASA TVF Working Group Leader/Advisor
- Board member of the British Aviation Group
- Advisor to CAMI, ADS AAM, VFS, Flight Crowd and Civata Global on Electric Aviation

Jarek Zych Director | Co-Founder

- 16+ years' experience in the commercial aviation sector focusing on airline and airport network development services
- Development of advance air mobility demand modelling tool and regional air mobility indexing method
- Development and optimisation of airline networks, schedules, operations, fleet, and revenues
- Strategy development and route analysis resulting in British Airways, Lufthansa and Hainan Airlines establishing services at San Jose, Air France at Taipei including network development, business planning and market assessment projects
- Advising leading airlines and airports by providing traffic, schedule, and real-time aircraft operations data

FMCI EA Maven

FUTURE MOBILITY CAMPUS IRELAND TEAM

Russell Vickers CEO | Co-Founder

- 26 years of experience in automotive and semiconductor technologies
- Background in ASIC Design
- Led the CAV Ireland steering group for testbed development in Ireland and updates to legislation to allow autonomous driving in Ireland
- Previous companies include Jaguar Land Rover, Parthus Technologies, Texas Instruments, Ericsson, and Intel
- Board Member of Foynes Flying Boat Museum

Wassim Derguech COO | Co-Founder

- 20 years of experience in software engineering, AI, and data analytics.
- PhD in Information Technology and MSC in AI and Decision Making
- Coordinator of EALU-AER Digital Sky Demonstrator - Ireland's First U-space Implementation
- Member of the Robots, Cobots and Robotics TC49 of the National Standards Authority of Ireland
- Previous employers include Jaguar Land Rover, Derilinx, and the University of Galway

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ADVANCED AIR MOBILITY WILL CHANGE THE "WHY" YOU CHOOSE TO FLY

EA Maven is a management consultancy firm focusing on solving the key challenges in Advanced Air Mobility (AAM) through the provision of AAM strategy support, demand modelling, infrastructure design and due diligence services.

AAM Demand Modelling & Scheduling

AAM Air Service Development

AAM Market Assessment

Advanced Air Mobility Infrastructure

AAM Air/Vertiport Acquisition Due Diligence

AAM Carbon Emission Savings Assessment

AAM Revenue Forecasting

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ADVANCED AIR MOBILITY WILL CHANGE THE "WHY" YOU CHOOSE TO FLY

Future Mobility Campus Ireland is an advanced mobility testbed for research, development, and innovation in both on land and in the air. Our advanced air mobility infrastructure is designed to demonstrate and prove the safety and management of both manned and unmanned airspace

Drones

Expert drone operators

Dedicated drone port

Experimental test facilities

Mobile operations centre (BVLOS)

Data driven control room

On-premise data centre

Private workshops and laboratories

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THE REPUBLIC OF IRELAND

AAM MARKET ASSESSMENT REPORT

FINDINGS

EA Maven

FUTURE MOBILITY
CAMPUS IRELAND

METHODOLOGY

SUMMARY

Cities and Airports

123
All cities under study*

16
All airports under study

* within 166 LEA shapes (Dublin includes 31 shapes, Cork 5, Waterford, Limerick, Galway 3, Bray, Athlone, Dundalk 2)

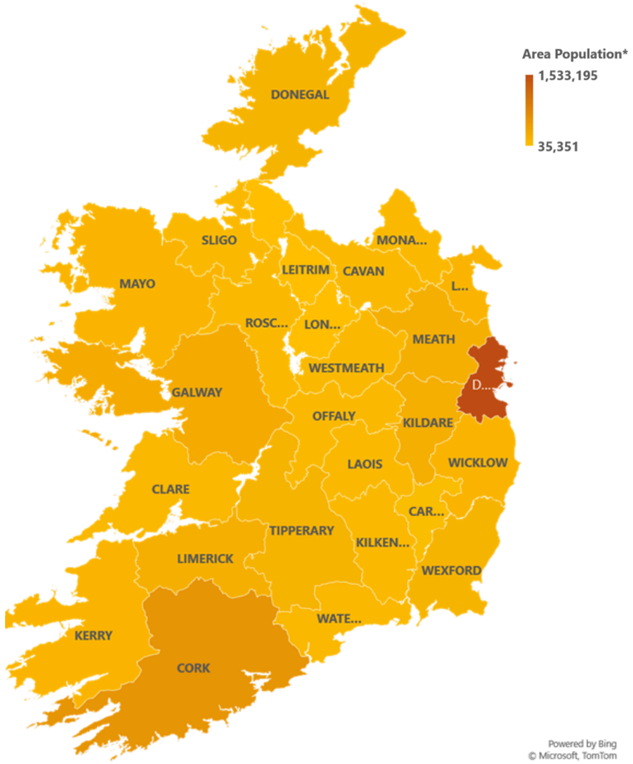
Population

2.8m
All cities under study

5.2m
All areas under study

Population of The Republic of Ireland by County

source: CSO Ireland, EA Maven analysis



Cities / Airports identification, population and coordinates (cities and main airports)

- Based on Ireland LEA spatial division (166 local electoral shapes + 16 airports) identification of cities/airports coordinates and population. LEA shapes population vs cities population analysis and comparison
- Identification of all possible routings between cities, cities-airports, airports-airports
- Distances calculations

Mobility data analysis (June 2023)

- Identification of total demand (weekly) between cities, airport-cities, airports-airports based on selected criteria:
  - min/max distance thresholds (30-120 miles, optimal range for eVTOL)
  - min city/shape population
- Demand analysis: mode of transport (road, rail), purpose of travel (business/work vs leisure/VFR)

Top 174 Routes identification (AAM City Index)

- Identification of the top routes based on the selected criteria:
  - Distance thresholds (30-120 miles, optimal range for eVTOL)
  - Population between points (min 1k population per point)
  - Min weekly demand between points

AAM City Analysis (On top 174 routes identified)

- Indexing analysis on:
  - Straight line distance and AAM/RAM travel time vs driving distance and travel time (ratios)
  - Gross Disposable Household Income (GDHI)
  - Propensity to travel (trips per 100k inhabitants)
  - Weighting factors
  - City/airport networking potential analysis
  - Criteria importance assignment

One route detailed AAM demand and scheduling analysis

- Selection of one route for further detailed analysis:
  - AAM demand modelling (EA Maven in-house model) – how many travellers would switch to new AAM services based on frequencies assumed.
  - Scheduling analysis:
    - # of aircraft required
    - Daily and annual ac utilisation, load factors
    - Revenue, economic stimulation, carbon emission savings

EXECUTIVE SUMMARY

UAM CITY INDEX - SELECTED ROUTES INDEXED

Cities and Routes

123
All cities under study*

4.7k
routes analysed**
of 7.1k routes in total (with no distance restrictions)

Total Addressable Market

2.72m
Travellers' weekly***

130.7m
Annually***

Mode of Transport / Purpose of Travel

86.9%
Of travellers by road producing significant carbon emissions*

20.2%
Business travellers

79.8%
Leisure/VFR travellers

1.86m (68.5%)
Irish travellers (based on mobile phone registration country)

0.86m (31.5%)
Foreign travellers (based on mobile phone registration country)

0.18m – UK
0.15m – USA
0.065m – Spain
0.064m – The Netherlands
0.060m - France
0.050m - Poland

Cities and Routes

103
All cities under study*

174
routes analysed**
of 4.7k routes in total

Target Market

1.86m
Travellers' weekly***

89.6m
Annually***

Mode of Transport / Purpose of Travel

87.4%
Of travellers by car producing significant carbon emissions*

21.7%
Business travellers

78.3%
Leisure/VFR travellers

Time Savings / Economic Benefits

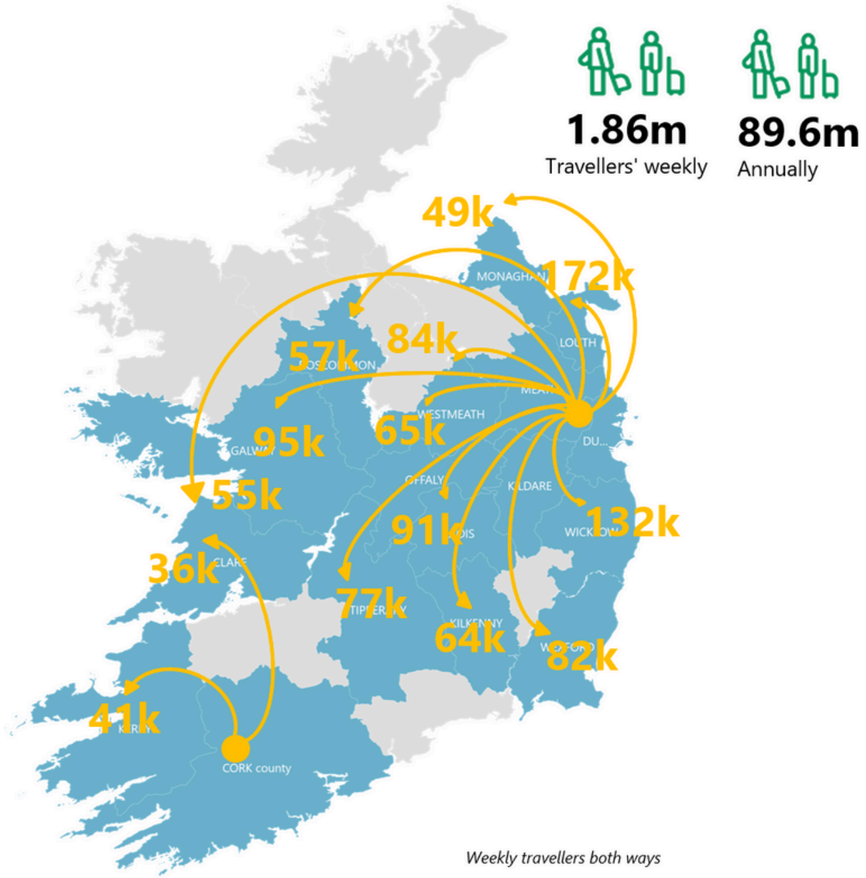
68.3k
Hours saved weekly if switched to AAM

3.3m
Annually

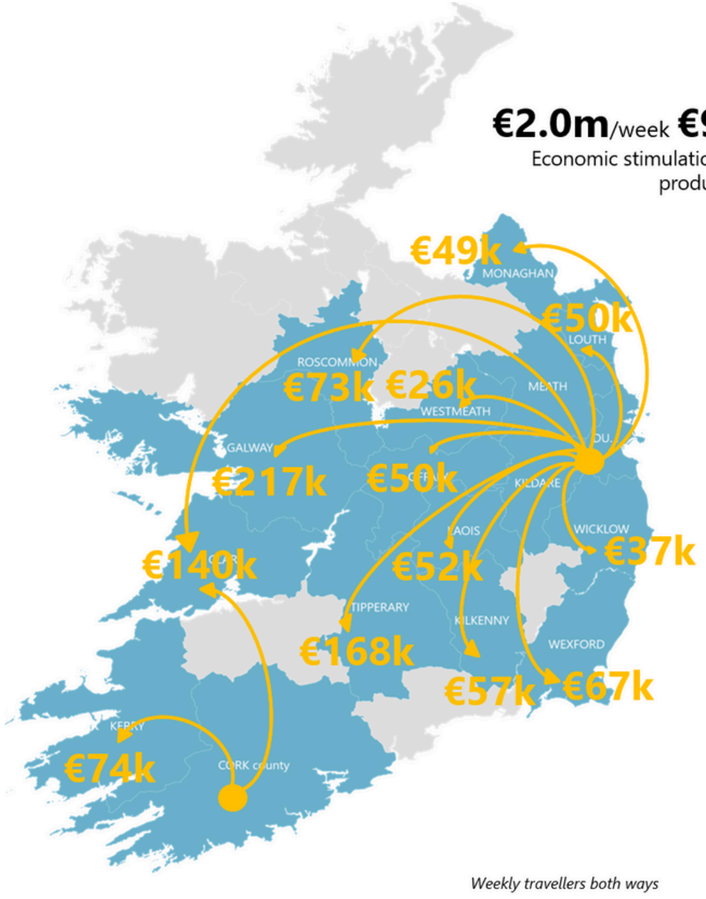
€2.0m/week **€96.5m**/year
Economic stimulation through increased productivity

IRELAND MARKET ASSESSMENT ANALYSIS

UAM CITY INDEX - REGIONAL TRAFFIC



UAM CITY INDEX - ECONOMIC BOOST



EXECUTIVE SUMMARY

REGIONAL AIR MOBILITY INDEX – SELECTED ROUTES INDEXED

** Based on LEA Ireland spatial division of 166 shapes. 16 airports' shapes plus the corresponding catchment areas.*
*** Total possible routings between all 16 airports (and respective catchment areas) within distance (80-500 statute miles)*
**** Sum of all travellers on 50 routes analysed.*
***** Based on EA Maven regression analysis of people likely to switch modes on all routes assuming optimal scenarios.*

Cities and Routes

16
Airports under study*

50
routes analysed**
of 120 routes in total (with no distance restrictions)

Target Market

1.64m
Travellers' weekly***

78.7m
Annually***

Mode of Transport / Purpose of Travel

70.9%
Of travellers by car/bus producing significant carbon emissions*

17.5%
Business travellers

82.5%
Leisure/VFR travellers

Time Savings / Economic Benefits****

111.5k
Hours saved weekly if switched to AAM****

5.3m
annually****

€4.0m/week **€192.1m**/year
Economic stimulation through increased productivity

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FUTURE MOBILITY

CAMPUS IRELAND

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Enterprise Ireland

An Roinn Fiontar, Trádála agus Fostaíochta
Department of Enterprise, Trade and Employment