



UNIVERSITAT POLITÈCNICA DE CATALUNYA  
BARCELONATECH

Escola Superior d'Enginyeries Industrial,  
Aeroespacial i Audiovisual de Terrassa

# Adapting Barcelona to Urban Air Mobility

Document:

Pressupost

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Titulació:

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TREBALL FINAL D'ESTUDIS

**APROXIMATED BUDGET OF THE PROJECT**

basic hypothesis		
aprox. cost of building a platform (€)	2000000	(according to Liliium)
unit cost (€)	1300000	(according to Joby)
aprox. cost of building a platform (€)	1720000	(\$1 = 0.86€)
unit cost (€)	1118000	(\$1 = 0.86€)
price per passenger mile (Uber) (€)	7	(1 mile = 1.6 km)
number of units built	8	
number of platforms built	6	
flights/day	571	
average miles/flight	1	
number of passengers / flight	4	
aprox. number of rainy days/year	60	
days/year with service	305	
cost of operations/flight (€)	2	

operators salary	170000
num. operators	5
rent/month	1000
rent/year	12000

a year

cost of platforms (€)	10320000
cost of vehicles (€)	8944000
<b>fixed costs (€)</b>	<b>19264000</b>

cost of operators/year (€)	850000
cost of the headquarter's office/year (€)	12000
cost of operations/year (€)	348310
light, water... and other costs (€)	0

hypothetical

neglected for this is only hypothetical and it would not affect considerably to the results obtained

<b>variable costs/year (€)</b>	<b>1210310</b>	<b>1210310</b>	<b>1210310</b>	<b>1210310</b>	<b>1210310</b>	<b>1210310</b>	<b>1210310</b>	<b>1210310</b>	<b>1210310</b>	<b>1210310</b>
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income/day (€)	15988									
income/year (€)	4876340	4876340	4876340	4876340	4876340	4876340	4876340	4876340	4876340	4876340
		<b>year 1</b>	<b>year 2</b>	<b>year 3</b>	<b>year 4</b>	<b>year 5</b>	<b>year 6</b>	<b>year 7</b>	<b>year 8</b>	<b>year 9</b>
<b>total cummulative cost/year (€)</b>		<b>20474310</b>	<b>21684620</b>	<b>22894930</b>	<b>24105240</b>	<b>25315550</b>	<b>26525860</b>	<b>27736170</b>	<b>28946480</b>	<b>30156790</b>
<b>total cummulative income/year (€)</b>		4876340	9752680	14629020	19505360	24381700	29258040	34134380	39010720	43887060
<b>balance</b>		<b>-15597970</b>	<b>-11931940</b>	<b>-8265910</b>	<b>-4599880</b>	<b>-933850</b>	<b>2732180</b>	<b>6398210</b>	<b>10064240</b>	<b>13730270</b>

<b>calculation of miles/flight</b>	
a segment is	115 m
average number of segments traveled per	15
average meters/ day	1725
en miles/flight	1.078125 1 aprox