



FUTURE OF MOBILITY SCENARIO GAME

Instructions and Facilitators Guide

Mobility Lab

t: +44 (0) 7958 350159

e: james@mobilitylab.org.uk

Find us online...

 www.mobilitylab.org.uk

 [@mobilitypolicylab](https://twitter.com/mobilitypolicylab)

Background

The mobility sector is fast changing, reflecting changes in the sector itself and wider social and economic changes that are impacting on people's ability, and willingness to travel. With environmental sustainability and increasing concern, and rapid changes in society taking place in cities across the world, people and organisations all over the world are striving to ensure that the future of transport in our cities is a just and sustainable one.

This will require a combination of shifts in travel behaviour, new technologies, new business models, and a focus on creating new opportunities for people. This requires a whole-scale transformation of the mobility sector, how it operates, who it provides for, and what it seeks to achieve.

As part of a foresight study on the Future of Transport 2050 undertaken for the UK Ministry of Defence's Global Strategic Trends work, Mobility Lab researched these trends, and identified a number of future scenarios for mobility globally. These scenarios were developed with the close engagement of a number of industry experts, with each scenario gaining its own narrative and understanding of systemic implications.

This scenario building focussed on global strategic changes, and impacts upon international and regional travel. After identifying the importance of cities in global mobility systems, more in-depth analysis was undertaken for the future of mobility in cities. This analysis forms the basis of this scenario game.

This research, and the scenarios generated, can be viewed online here.

Credits

The inspiration and template for this scenario game came from the EU Policy Lab's Scenario Exploration System. Consequently, you should check out their website:

<https://blogs.ec.europa.eu/eupolicylab/>

Copyright and Licencing

This Scenario Game is distributed under an open source licence.

Principles of Scenario Game

Scenario Games have often been used as a way of understanding the systemic implications of different actions on desired or undesired outcomes. War gaming is a common method of this, but scenario gaming is becoming an increasingly popular tool to explore the future with. This scenario game is based upon the template provided by the Scenario Exploration System (SES) produced by the European Union's Policy Lab team.

The purpose of this game is to put participants in the shoes of other people and groups, so they can explore the future in a systemic way that is outside of their usual way of thinking.

Using four of the scenarios from the Future of Transport 2050 study, participants are able to explore the future by playing one of four roles: National Government, Local Government, Business, or a Non-Governmental Organisation (NGO). A fifth participant plays the role of the Public Voice, analysing the actions of the participants and giving feedback and value judgements on them.

There is not necessarily a winner in each scenario game – though those with the highest score can be crowned as winners if you like. What is important is participants gain a view of the future that is outside of their own frame of reference.

A debriefing and discussion session is held at the end of the game. Each exploration ends up telling a unique story that can be recorded for further analysis.

Finally, this game has been established in a way that means it is adaptable to your own vision of the future. So long as the megatrends and variable drivers are consistent (see below), you can adapt this game to your own future mobility scenarios. But the basic game that we have produced is just as good!

Megatrends

Right at the start, all participants are made aware of the key megatrends that will be used in each scenario game. There are five for each scenario to be explored. These trends should be taken account of as far as possible throughout the game.

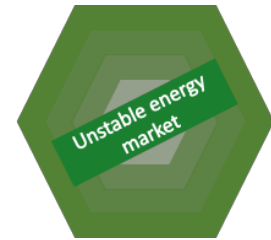


The corresponding cards are placed on the board face down during the explanations and will be used in the exploration as possible concerns of the Public Voice.

Uncertainty Cards

Our work with the UK Ministry of Defence also revealed a number of uncertainties, that will impact the future in unknown ways. For the game, they will influence what people do in unknown ways.

Before playing, shuffle the uncertainty cards and place them face down in the space provided. At the start of each round, a new uncertainty is revealed and will be the main uncertainty for that round.



These uncertainties are:

- New governance models
- Worsening pollution
- Dominance of the developing world
- International travel demand
- Social innovation
- Sharing revolution
- New technology scalability
- Disruption of trade routes
- Impacts of climate change
- Competition or co-opetition
- New leadership on mobility issues
- Public or private ownership
- Unstable energy market
- New investment in mobility

Real Life Cards

To balance the actions of the main players against the public voice, a number of real life cards have been created to describe real life events that can be used by the 4 main participants.

Participants (not the public voice) pick 2 Real Life cards. They can play a maximum of one Real Life card at each round. Each card contains the instructions on how to use it.

After having used a card, they pick a new one from the pile so as to have the choice between two cards for the next round.

The Real Life cards created are:



- Accounting error
- A friend puts in a good word
- Safety scandal
- Better to be safe than sorry
- Take advantage of uncertainty
- Working together
- Public worry
- Pivoting
- Fast communications
- Uncertain future
- New trend justification
- New trend boost

Actions, Collaborations, and Resource Tokens

Each participant (not the Public Voice) receives a set of action cards adapted to their role. Participants can invent new actions if necessary using generic 'Action' cards. Regardless, on their sheets they record the action that is taken.

They receive Resource Tokens (RTs) to give strength to their actions. The number of RTs per role for all three rounds and the minimum RT "cost" of an action depend on the scenario being played. This information is shown on the scenario disc at the centre of the board. Explorers use RTs as they please.

In the 1st round, the explorers act individually. In the 2nd and 3rd rounds they can, in addition to acting individually, also collaborate upon request with one, two, or three other explorers. In that case, each contributes as many RTs as desired. The cost in RTs is shown on the scenario disc.

Participants put collaboration RTs on the action card of those who accept to collaborate with them. A key advantage of collaborating is that each partner receives the full score from the card where there is collaboration. Collaboration is cheapest in the collaborative scenarios.

The Public Voice and Future Impact Tokens

As the Public Voice is an observer, its influence will not be expressed through actions but through its analysis of the situation and its narrative they will write and share with everyone at the end of each round.

But policy makers and markets are accountable to users, i.e. the public. So the Public Voice gives more or less weight to each action through red Future Impact Tokens (FITs). The Public

Voice receives 10 FITs for each round and is free to place them as it pleases. Any unused FITs after a given round can be used by the Public Voice in subsequent rounds.

The score of each action is obtained by multiplying the number of Resource Tokens put by the explorer owning the action (and any RT added by collaborators) by the number of Future Impact Tokens attributed to the action by the Public Voice.

In the case of collaborations, each collaborating partner receives the total obtained by the action.

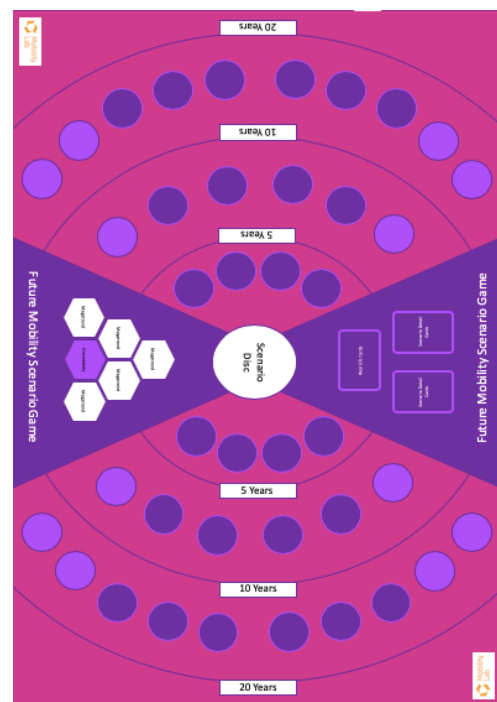
Playing the Game – Preparation

Together with the exploration master, the participants pick the two scenarios to explore and select a theme on which the session will focus. Ideally, these scenarios should be completely different to one another. The coloured disc corresponding to the first selected scenario is placed on the circular space in the middle of board and the corresponding Scenario Detail cards are placed on their indicated positions on the board.

Scenario 1, First Round

Set up the board with the following component in their designated positions:

- One scenario circle card and its corresponding detail cards are placed on the board;
- Real Life cards are placed face down;
- Megatrends placed in the spaces marked 1-5.
- The variable driver cards are placed face down in space number 6.



The appropriate number of action cards and resource tokens are handed out to the participants

The public voice gets 30 FITs.

Distribute the record sheets to all participants. Participants introduce themselves. They now take a few minutes to choose a role in line with the selected theme and provide a rationale for their choice.

The four actors define their role and long-term vision in detail ("where does your organisation want to be in 20 years?"). The business actor should have a clear business plan, define its location, size, market, suppliers, etc. Business actors may keep their visions secret. The NGO must define its scope, objective, membership, etc. The national government must specify what government department it is, e.g. Transport, Land Use Planning, Treasury etc. The Local Government must be the city government or equivalent authority with responsibility for local transport.

The Public Voice defines its own profile (socio-economic positioning, political opinion, aspirations, etc...). It must define clearly the perspective or philosophy that it will represent and explain it to all. The public is not homogeneous and the person is free to choose any sufficiently representative standpoint.

All participants except the Public Voice pick two Real Life cards that they keep secret. They may use only one card at each round, of their own choice, according to the instructions on them (usually at the end of the round). After having used a card, they pick a new one from the pile so as to have the choice between two cards at any time.

You then turn over the top uncertainty card.

The Exploration Master reveals the 5-year scenario detail cards on the board. Read them and build a story including the six elements that they contain (numbered 1 to 6). The cards describe a set of events that unfolded over the five years leading us into Round 1. All participants roll the die (not the Public Voice). The highest score plays first, the others in an order descending according to their roll of the die (6 goes first, then 5 etc.).

Participants get 3 min to define what action they want to take. They write what their action is and how many tokens they use to support it on their record sheet. They then have 2 min to place their Action Card and corresponding RTs on the board and give a verbal explanation for the action.



Once all four explorers have acted, the Public Voice explains its perspective on each action, its overall perspective on the situation and distributes Future Impact Tokens. Then, Real Life cards may be used (no obligation). Some can be used earlier (see specific instructions on the cards).

Scores are calculated after all Real Life cards have been used.

The explorers that have used a Real Life card pick a new one so they hold two at the start of every round. The Exploration Master records the scores.

Round 2

This round focusses on 10 years in the future.

A new Uncertainty is revealed that will affect this round. The previous one is placed at the bottom of the pile. The Exploration Master describes briefly what happened in Round 1, and then reveals, reads and builds a story based on the 10-year Scenario Detail cards. These cards describe events that have taken place over the five years separating us from Round 1.

All explorers roll the die, following the same logic as the previous round. They then repeat the same process for defining their action, recording it, and deploying their resource tokens. They then have to explain their action as per Round 1.

The explorers who want to collaborate invite others to do so when it is their turn. The invited explorers who accept to collaborate put Resource Tokens on the corresponding action(s).

Once all four explorers have acted, the Public Voice gives its overall perspective on the situation and distributes the red Future Impact Tokens, as per Round 1. Real Life cards are then deployed as per the last round (remember to pick up new ones come the end of the round).

The Public Voice writes his/her analysis and decisions on his/her record sheet, along with the token distribution.

The Exploration Master records and calculates the scores after all Real Life cards that explorers wanted to use have been revealed.

Round 3

The final round takes place 20 years in the future. A new Uncertainty is revealed that will affect this round. The previous one is placed at the bottom of the pile.

The Exploration Master describes briefly what happened in Round 2 and then reveals, reads and builds a story based on the 20-year Scenario Detail cards. They describe a set of events that have taken place over the ten years separating us from Round 2.

The round then proceeds as per round 2.

At the end of the round the Exploration Master records and calculates the scores after all Real Life cards that explorers wanted to use have been revealed. They then calculate the overall scores obtained by each scenario explorer.

One complete phase of scenario exploration (round 1-3 completed) you should have a board full of actions, with their corresponding tokens similar to that shown here.

The scenario has developed across all three rounds and each detail card has been revealed. Participants have acted according to their roles, resources, and the visions they wanted to reach. The Public Voice has determined the influence those actions have had over the course of the exploration.

Wrap Up

The Exploration Master describes briefly what happened in Round 3 and summarizes the events that unfolded over the three rounds, and tallies the scores of all explorers over the three rounds. Any secret visions are revealed and a collective assessment is made of how close each explorer came to their objective and of how close this sequence of events has brought us to a sustainable future.

Reflections of the challenges each participant faced are also given through a short group discussion.

Doing it all again

Players now focus on the other half of the board. They then play the other scenario chosen. The scenario disc and scenario details are put in their respective positions. Each participant keeps the same role and the same vision at the beginning of phase 2 but receives a new level of resources in line with the new scenario. The game then proceeds as it did for the first scenario.

At the End

Once you have played the second scenario, the game is over. At this point, a whole group conversation can take place to reflect on the experiences everyone felt during the game.

What you discuss is up to you. But you may want to think about asking:

- How do you feel?
- How different were the outcomes of both scenarios?
- Do the stories that were created make sense?
- What did you learn from the session?
- How has it changed your mind on a specific issue?
- How would it be different with a different audience?
- Who should play this game if we were to do it again?
- Does it make you feel more or less confident about the future?

Record sheets can be collected and analysed further later.

Materials

Some of the game pieces are provided in a zip file that can be downloaded here. They are:

- Scenario Cards
- Action Cards
- Real Life Cards
- Megatrends Cards
- Uncertainty Cards
- Real Life Cards
- Record Cards
- Scoring Cards

The materials that you need to source to play this game are:

- Small tokens of one colour to be the resource tokens (at least 40)
- Small tokens of another colour to be the Future Impact Tokens (at least 30)
- A six-sided die

Feedback

The Future Mobility Scenario Game has been released as a public beta. Accordingly, we would love your feedback on the game, and suggestions of how it can be improved. And importantly your experience of using it!

You can provide your feedback via email to james@mobilitylab.org.uk.