The MIMIC Boardgame – Rules and guidelines

Outline

This is a simple board game for 3-5 players, taking the role of actors in and around a building site. They must manage the flow of materials to and from the building site, enacting measures as needed to ensure that the buildings are completed on time, with as little impact on the environment and the locals as possible.

Goal of the game

Builders want as many points as possible at the end of game. Besides points scored for completing their houses on time, Builders also score based on an individual hidden agenda, leftover budget and City goodwill/badwill.

The City wants the buildings completed on time with a minimum of disturbance.





Components

- 4 map sections depicting building sites
- Turn tracker and -marker
- Long road stretches
- Entry road stretches
- Trucks in four colors.
- Houses in four colors and three building stages: foundation, structure, and roof.
- Events, Logistics, Ordinances, Agenda, Goodwill/Badwill cards
- Counters: Road Closed, Stretch Reinforced, etc.
- Planning sheets
- Money markers
- Victory Point markers
- Disturbance markers
- Material and Waste markers

Game set up

- 1. One player takes the role as City, the others as Builders.
- 2. Give each Builder §21 this is their expected profit. (Should builders run out of § during the game, they may go into debt)
- 3. Each Builder selects a color and takes the trucks and houses in their color.
- 4. Hand each Builder a planning sheet.
- 5. Set up the map sections with road stretches in between, as well as the entry stretches (see illustration).
- 6. Place the turn marker in the first square of the turn tracker.
- 7. Shuffle the "Logistics" and "Ordinances" card piles, and place them face down within reach of the City. Give the City the "Goodwill/Badwill" cards.
- 8. Shuffle and place the event cards in the event card space.
- 9. The City draws an initial hand of four (4) Logistics cards.
- 10. Shuffle the Agenda deck and give each Builder one (1) card, putting the remaining cards away without looking.

Turn structure

- 1. The City (or workshop organizer) draws a card from the *event deck*, outlining any specific conditions for the turn.
- 2. The City player takes its turn
 - a. The City draws a card from the Logistics deck.
 - b. The City may suggest 1 or 2 Logistic measures from its hand by placing the respective card onto the table.
 - c. Each Builder secretly bids a number of money (§) towards enacting the measure. All bids are then revealed, and if the combined total is equal or greater than the



- cost of the measure, it is enacted and stays on the table. If not, it is discarded. All bids go back to the bank.
- d. The City may now enact an ordinance by placing an ordinance card onto the table

3. The Builder turn

- a. All Builders have three (3) minutes to plot their transport routes; see "Plotting Routes" below.
- b. All Builders place their trucks according to their plotted routes. If they place trucks on either the Long Route or the Inner City Route, they pay §1 or give the City 1 disturbance respectively.
- 4. All stretches that have more trucks than their Capacity (as indicated by the number of spaces for trucks) are *congested*; remove all trucks from that stretch and give the City 1 Disturbance.
- For each intact route from entry to building site, Builders may place one (1) Materials marker at any of their houses at that building site, OR remove one (1) Waste marker from that building site.
- 6. Give the City 1 Disturbance for each three (3) Waste markers on any building site (round down).
- 7. If a Builder has enough Materials on a building site (1 for small buildings, 2 for medium and three for large), it can remove the materials and add the next building stage (first the foundation, then the structure and finally the roof). This also generates 1 Waste marker in that building site.
- 8. The turn marker is moved one step forward.
 - a. The City hands 1 goodwill and 1 badwill card to Builders that the City feels deserves them.
 - b. If this is the end of turns 2, 4 or 6, award each Builder 1/2/3 VP per finished stage on size 1/2/3 buildings. *Example: 9 VP for three stages of a size three building.*
 - c. If this is the end of turn 6 or all buildings have been completed, the game ends;
 - i. reveal Agendas and award VP accordingly
 - ii. Hand each Builder 1 VP for each 3 remaining budget (round down), -1 for each 3§ in debt (round up)
 - iii. Each Builder gets +1/-1 for each goodwill/badwill card.
 - iv. The Builder with the most VP wins.
 - v. Evaluate City performance based on the amount of Disturbance markers they have accumulated throughout the game (see table).

Disturbance	Performance
0-10	Excellent!!
11-20	Good!
21-30	Mediocre
31-40	Bad
41+	Horrible!



Plotting Routes

In order to plot a route, Builders must secretly (and without communicating/negotiating with the other Builders) write down how many trucks they want to put on each stretch on their planning sheet. An intact route must have one truck on each stretch from an entry to a building site (including both).

Example: Mary wants to ship 1 material to building site A and 2 to building site B. Hoping for less competition, she wants them all through the Long Route entry, even if this will cost her some §. She notes a '3' for three trucks at the Long Route field of her planning sheet. For the first route, she then notes a '1' on three more road stretches, including one at the building site itself. For the remaining two routes, she notes a '2' on all the stretches needed to reach the second building site.

Note that Builders in no way need to take the most direct route to their destination; they are encouraged and expected to use whatever circumspect traversals they need to get the job done.

Clarifications:

- Whenever a card says "all builders bid", this is done in §, secretly.
- When the *Waterway access* logistics card is funded, place the waterway route opposite the central entry stretch.

Playing with three or four players

While five players is optimal for the game, it can be played with fewer by removing boards (use one board per Builder), reallocating buildings and lowering Capacities ("outer" stretches should be Capacity 3, and the entry stretches reduced to 2 for three players and 4 for four players).

Instructions for the Workshop Organizer

If this game is used as part of a workshop (as it should!) with a discussion afterwards, these are some pointers for the workshop organiser (or whomever demonstrates the game).

- Describe the game and the board as depicting an abstract situation in order to facilitate
 play and discussion, not an attempt to recreate an actual building site. Remember that
 both things in the game that are similar to the real world and things that are not can be
 seeds for a fruitful discussion.
- When players play cards and events are drawn, you have the opportunity to describe the "action" more fully, adding atmosphere to the game, and possibly educating the players on the different logistics solutions.
- The rules players most often like to break are the time limits and ban on communication/negotiation during planning. Players with little experience with games also sometimes see rules more like guidelines and like to do whatever they want it is your job to curb this in a fair but strict manner.
- Also, some players like to try extreme moves just to test things out; such as betting all
 their money on a single card, and the like. Since this type of play can lessen the
 experience for everyone (and especially for the player themselves) you might want to
 warn players when they do.



- While it is perfectly possible to play the game with more players by having them team
 up, note that this makes the game last significantly longer. It is often worth to see if it
 isn't possible to separate the group between multiple tables instead.
- Laying the groundwork for later discussion can be just as important as facilitating the game itself. Take note of interesting situations and plays, to be raised as examples later.
- For more information on the facilitator role and different types of players, see (Bergström et al. 2020. The MIMIC construction logistics game: facilitating group discussion and
- understanding of construction logistics through gameplay, *IOP Conf. Ser.: Earth Environ. Sci.* 588).

