

EXPERT PANELISTS SO FAR

Session 1: Status of the Golden Dome



Dr. Jessica West

Project Ploughshares



Sam Wilson

Aerospace Corporation

Session 2: Technical feasibility considerations for the Golden Dome



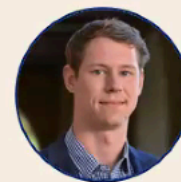
Dr. Laura Grego

Union of Concerned Scientists



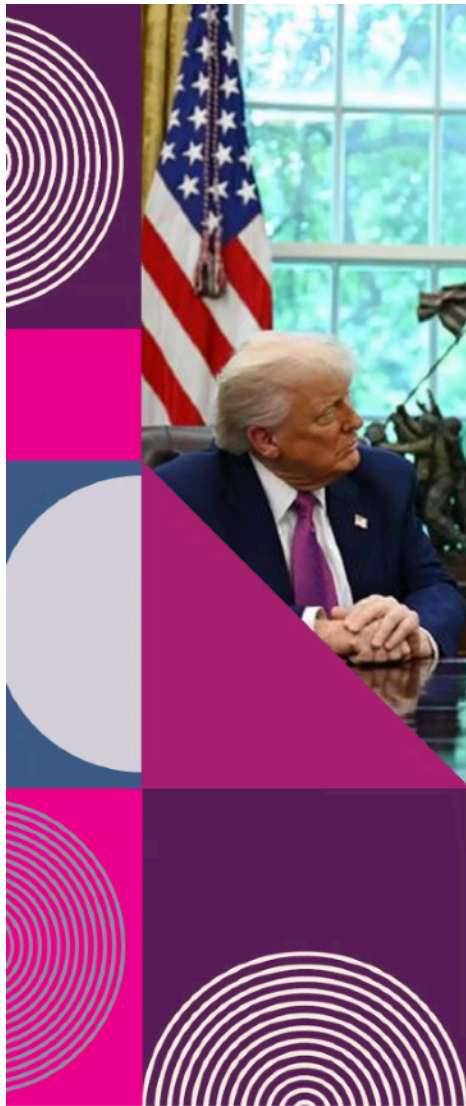
Todd Harrison

American Enterprise Institute



Dr. Cameron Tracy

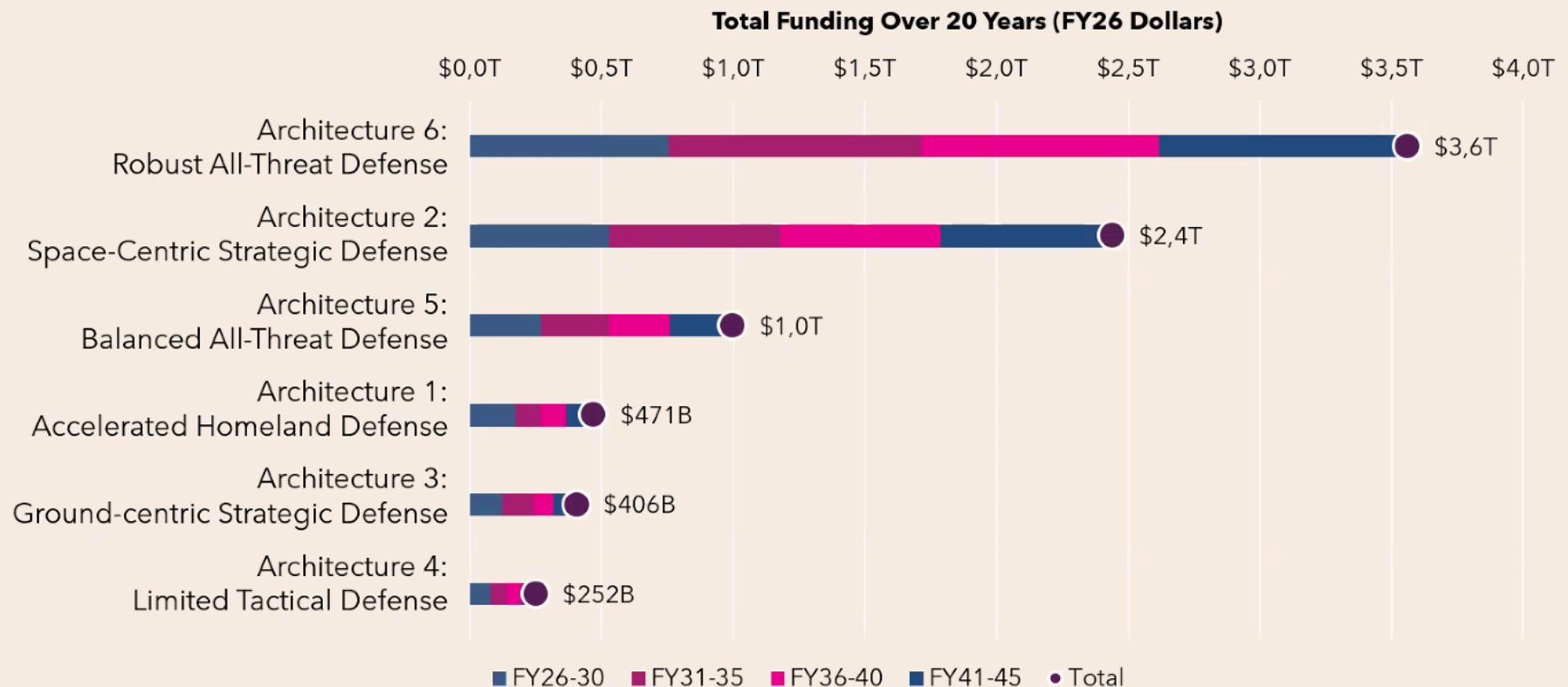
UC Berkeley



SKETCHES OF A CONCEPT

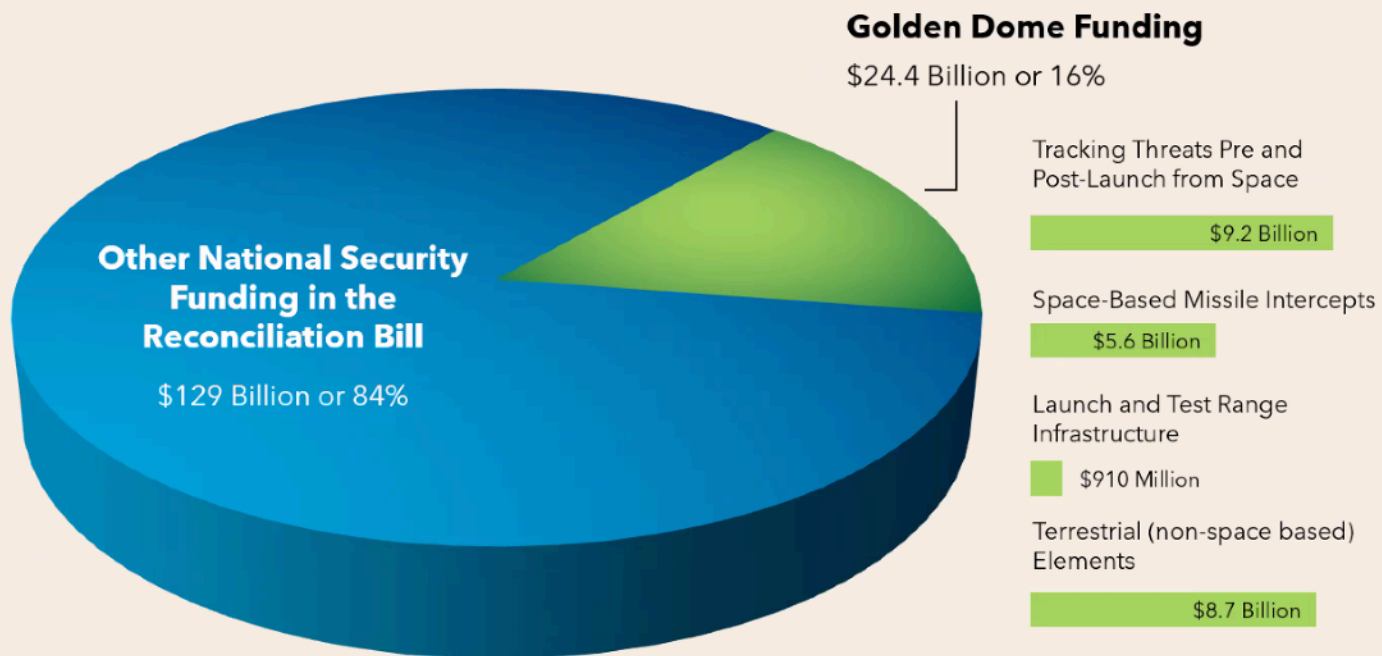
- **Goal, money, timeline:** Nearly 100% effective against all threats, \$175B total cost, completed in three years
- **Casting a wide net:** defence of the US against ballistic, hypersonic, advanced cruise missiles and other next-generation aerial attacks
- **Space component:** orbital assets are expected to play a prominent role in the Golden Dome architecture, including through the **development of space-based boost phase interceptors**
- **Uncertainty:** no public description of the system's architecture
- **Private sector engagement:** companies are playing a key role in influencing the design of the system architecture

THE COST OF GOLDEN DOMES



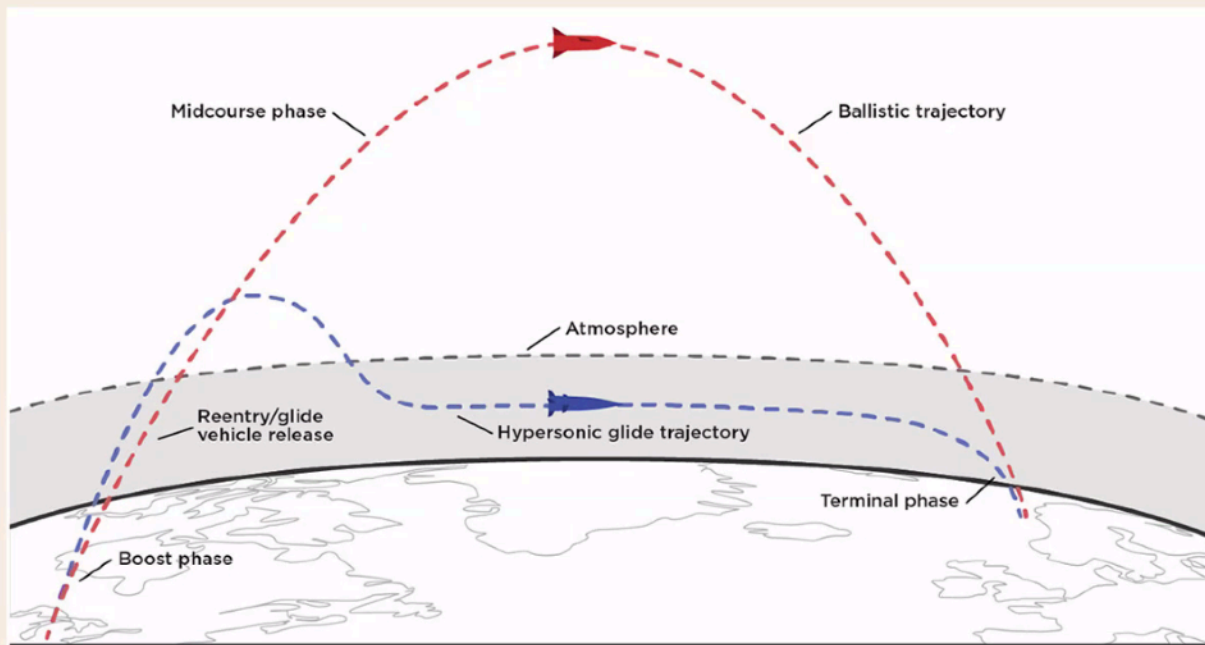
Graph courtesy of Todd Harrison, American Enterprise Institute (2025)

BUDGET FY2026



Graph courtesy of Sam Wilson, Aerospace Corporation (2025)

BALLISTIC AND HYPERSONIC PHASES OF LAUNCH



Cameron Tracy, Union of the Concerned Scientists (2021)

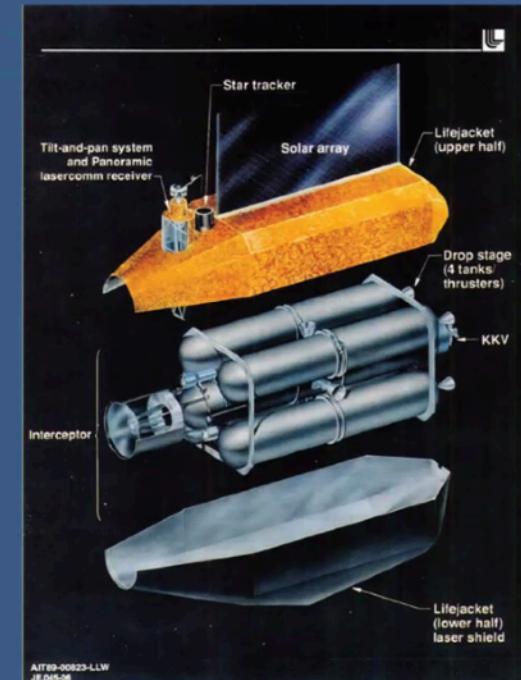
MIDCOURSE MISSILE DEFENSE

- Timeline for defence is around **30-35 minutes**
- Defence can be primarily **placed in the defended area**
- **Must deal with multiple re-entry vehicles**, launch debris and countermeasures
- Informed by **space-based infrared** and **ground-based tracking and discrimination radars**
- The **main issue** for midcourse defence is the difficulty of managing **countermeasures** (e.g. decoys, chaff, jammers)



BOOST PHASE MISSILE DEFENSE

- Timeline for interception is around **2-4 minutes, minimising decision-making time**
- Practical range limit reduced to **standoff distances, making space-based interceptors often necessary**
- Can be **countered by ASATs or by overwhelming the system with numbers**
- To **defend against a salvo of 10 solid-propellant ICBMs** launched by North Korea the system would need 40,000 SBIs, assuming only one SBI per ICBM,
- The construction and launch **cost of that system could be around \$1 trillion**



HYPERSONIC MISSILE DEFENSE

- **Focus on hypersonic glide missiles**, which are missiles that follow a ballistic trajectory equipped with gliders capable of an atmospheric glide
- **During their boost and ballistic phase, defence is identical to ballistic missile midcourse and boost phase defence**
- **Glide-phase** defence requires **new seeker designs, but it is not impossible**
- **Terminal phase defence is easier** than ballistic missile intercepts **due of slower movement**
- Orbital sensors will **go beyond traditional infrared**



A FEW PENDING QUESTIONS

- To what extent will the initiative have bi-partisan support?
- What will the role of orbital SAR, optical and RF sensing be in the future possible architecture?
- What would success truly mean for the Golden Dome?
- How will the Golden Dome be perceived by other nuclear powers?
- What should non-nuclear weapon states do about this?

