

Table 1. Summary of Deliverables

| ID | Deliverable | Total Effort | MVP Delivery |
|---------------------|--|-----------------|----------------|
| Sim 1.1 | Sim. realistic catalogs of SNe Ia and non-SNe Ia data for Infrastructure Dev. | 3.46 | '24 |
| Sim 1.2 | Simulate Pixel images to test Photometry/Calibration | 2.90 | '24 |
| Sim 1.3 | Simulate 3D datacubes and 2D spectra to test Spectral Extraction | 1.95 | '25 |
| Sim 1.4 | Aid the community in optimizing the design of the HLTDS via catalog sims. | 0.79 | '24 |
| Cal 2.1 | Characterize and mitigate detector effects to levels of 0.3% over 11 mags | 4.84 | S:'25;D:'27 |
| Cal 2.2 | Characterize passband throughputs and their field Dependence to 1 Å | 5.80 | S:'25;D:'27 |
| Cal 2.3 | Constrain prism spectral response across observing field to 0.2% per 5000 Å | 2.41 | S:'25;D:'27 |
| Cal 2.4 | Propagate calibrated spectrophotometry of primary standards to 1 mmag | 1.53 | '27 |
| Cal 2.5 | Develop an error covariance matrix | 0.25 | '27 |
| Phot 3.1 | Build a general-use, rapid transient discovery pipeline | 9.07 | '25 |
| Phot 3.2 | Develop, test, and validate a scene-modeling pipeline with < 2 mmag bias | 3.46 | '25 |
| Phot 3.3 | Measure host galaxy photometry and physical properties | 0.25 | '27 |
| Spec 4.1 | Remove self-contamination from the host galaxy by linear reconstruction | 4.50 | '25 |
| Spec 4.2 | Subtract local background | 1.05 | '25 |
| Spec 4.3 | Extract and model the one-dimensional transient spectra | 1.10 | '26 |
| Spec 4.4 | Physically model the host galaxy | 1.48 | '27 |
| Spec 4.5 | Analyze observed data and validate simulations/algorithms | 2.15 | '26 |
| Char 5.1 | Create infrastructure for classification of SN light curves (and other transients) | 1.52 | '24 |
| Char 5.2 | Create infrastructure to evaluate SN type and features from prism spectra | 1.58 | '26 |
| Char 5.3 | Improve codes for training of SN Ia SED models | 1.33 | '25 |
| OS 6.1 | Design tools for Community Input on Observing Strategy | 0.70 | '24 |
| OS 6.2 | Build Observing Strategy Quick Assessment Capabilities | 2.95 | '24 |
| Cos 7.1 | Enhance cosmology pipeline Pippin for rapid <i>Roman</i> forecasting | 2.28 | '24 |
| Cos 7.2 | Recover input cosmology from catalog-level simulations | 0.70 | '25 |
| Cos 7.3 | Recover input cosmology from image-level simulations | 1.10 | '26 |
| Cos 7.4 | Recover input cosmology from prism-level simulations | 1.00 | '26 |
| Cat 8.1 | Create a database to organize transient event data products | 2.02 | '25 |
| Cat 8.2 | Run Public-Facing Web Interface to Transient Data | 1.39 | '28 |
| Cat 8.3 | Setup & run Transient Alerts | 1.75 | '28 |
| Cat 8.4 | Release Value-Added Catalogs | 0.25 | '28 |
| Support 9.1 | Workshops | - | '23-28 |
| Support 9.2 | Data Challenges | - | '23-28 |

NOTE—MVP—minimum viable product, S—with simulations, D—using data. The MVP, which we consider a first tool useful enough to be shared with community, will be aligned with paper submissions. We calculate $\sim 80\%$ of these deliverables will lead to papers, either in astronomy-focused or instrumentation-focused journals.

Ethics Board: The Ethics Board will act as the ombuds-system for the PIT, and include individuals at different career levels. The Board will create and enforce the code of conduct and assess the climate of the collaboration.

Section Leads: Each set of deliverables will have one or two section leads responsible for managing a subset of the PIT's effort and working with Pipeline Scientists to ensure the PIT creates a functional analysis system. We will encourage early career (non-permanent position) scientists to participate in this role. Section leads are a good pathway to develop the knowledge and skills needed for other PIT roles, such as an Executive Board member or